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THE HISTORY

OF

MARITIME AND INLAND DISCOVERY.

VOL. III.

LONDON:
PRINTED FOR
LONGMAN, REES, ORME, BROWN, AND GREEN,
PATERNOSTER-ROW;
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THE HISTORY

OF

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BOOK V.

CHAP. I.

PROGRESS OF GEOGRAPHICAL SCIENCE.

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THE various branches of human knowledge are so intimately interwoven, that it is hard to conceive an improvement in one which does not conduce to the advantage of the others. The modes of connection which exist between the numerous objects of mental research, are, like the membranes that embrace the humours of the eye, so minute and transparent, that while they give

union and solidity to the whole, they themselves remain unperceived, or wholly invisible. The general advancement in knowledge which followed the discovery of the art of printing, and the increased activity and spirit of mercantile enterprise resulting from the discoveries of Columbus and Vasco de Gama, all seemed to conspire to the improvement of geography; and one might have supposed that this study would have been the first to arrive at perfection: but notwithstanding the zeal with which geographical enquiries were prosecuted during the sixteenth century, this science grew up with so many original imperfections, that its rudeness and deformity, compared with its sister sciences, became continually more conspicuous.

No errors are so difficult to correct as those which are adopted by the people. Opinions received implicitly are seldom overturned by the arguments of reason; thus geography laboured under a disadvantage from the very popularity of its nature. A system was in vogue, and, though manifestly incorrect, still maintained its ground until the scientific principles against which it offended became as generally known and recognised. The most eminent geographers of the 16th and 17th centuries were men of learning, who, in the spirit of that age, adopted with zeal and obstinacy all the mistakes committed by the writers of antiquity. The authority of their names, added to that of the ancient writers on whom they rested, offered an inert resistance which scientific geographers were long unable to overcome.

The first requisite in a correct system of geography is, to determine accurately the relative position of places; but in this the ancients were guilty of gross errors. The method which they employed to determine the latitude of places admitted of but little precision, and their determination of longitude was still more erroneous.

The countries with which the Greek and Roman writers were best acquainted were those situated on the shores of the Mediterranean Sea; and here, of course, we should expect to find their geographical accuracy exhi-

bited to advantage: yet Constantinople or Byzantium, the capital of the eastern empire, is placed by Ptolemy two degrees to the north of its true position. The Arab writers, who seem to have learned that there was an error of two degrees, without knowing in which direction, instead of lessening the latitude of Constantinople from 43 to 41, which would have been near the truth, increased it to 45, thus placing that city in their maps 276 English miles to the north of its true place. When Amurath III., about 1580, caused observations to be made, which reduced the latitude of that city to 41° 30′, the learned were indignant that barbarians should think of correcting Hipparchus.

As the northern shore of the Mediterranean was placed by Ptolemy in general too far to the north, so the southern shore was removed too far to the south; the breadth of that sea being thus increased far beyond the truth. The latitude assigned to Carthage was 32° 20′, which is 4° 32′ or 313 English miles to the south of its true place. This gross error was not taken notice of till 1625.

But these errors of the ancients in calculating latitudes were far exceeded by those which they committed in measuring the longitude, even at the places with which they were best acquainted. The length of the Mediterranean from Calpe or Gibraltar to the bottom of the bay of Issus, where Scanderoon stands at present, which is really a distance of 41° 28′, is increased in the map of Ptolemy to 62 degrees. Thus the error in the length of the Mediterranean alone amounts to 20° 32′, or nearly 1400 English miles; and this enormous error continued in the maps of Europe with little change till the beginning of the last century.

The difficulties of ascertaining the longitudes of places while astronomical observations were still deficient in precision, and the extent to which those errors were carried during the middle ages in fixing the relative positions of even the best known places of Europe, may be estimated from the following list, formed by Kepler, who, feeling that his own observations would overturn

those of antiquity, pleaded by way of excuse the inevitable uncertainty of these calculations: —

The difference in longitude between Rome and Nuremberg in the time of

Regiomontanus was reckoned at	9°	
Werner	8	
From an eclipse in 1497	7	
Apianus	8	30′
Mestlin	8	15
Stoffler	4	30
Apianus again	4	45
Magini	6	30
Schoner	3	
Stade	3	15
Jansen	2	30
Kepler	1	

Thus the difference in longitude between two of the best known towns in Europe varied above 500 miles from the fifteenth to the seventeenth centuries. But this uncertainty will appear more remarkable when found to exist in the longitudes of places which are nearly in the same latitude. For this purpose Ferrara and Cadiz may be conveniently compared. The difference of the longitude between these two places as stated by

Ptolemy in the edition of 1475 was	27°	20′
Alphonsine tables	1492	27	30
Mauro the Florentine	1537	28	13
Apianus	1540	27	5
Gemma Frisius	1578	27	55
Ridolfine tables	1627	17	
Argoli	1638	24	35
Riccioli	1672	19	27
Schott	1677	26	50
De Lalande	1789	17	52

Hence it appears, that in the maps of the sixteenth century Cadiz and Ferrara were placed 600 miles too far asunder, and that this egregious error still maintained its ground till the close of the seventeenth century. *

* See a dissertation on the fluctuation of longitudes in the middle ages, by Canovai, in the *Memorie dell' Academia di Cortona*, vol. ix.

Errors of a wilder kind, originating rather in credulity than in positive inaccurate observation, found a place in the maps of the middle ages, and were tardily banished from them, at a comparatively recent date, by the improvements of astronomy and navigation. We will here glean a few of those errors from the best of the early maps.

From a map of the world published in Venice in 1546, by Giacomo, we find Asia and America united in lat. 38°. Thibet is placed at the junction of the two continents, and Zangar is the name given to the remote region on their frontiers. California, it is remarkable, is here described as a peninsula. China, conformably to the map of Ptolemy, stretches to the 180th degree. In the South Sea the *Isla de los Tuburones*, discovered by the Spaniards, is marked in 10° S. lat.

In another Venetian map by Tramezini, dated 1554, the distance from Quinsai in China to the gulf of California in America is only 31°. These two continents being unduly stretched some thousand miles respectively to the east and west. In this map is marked the *Island of Papuas*, or New Guinea, and the Ladrones; but it is remarkable that Asia and America are here separated by a wide strait, the author observing in a note, "In this place we have followed the latest authorities in separating this coast of Tartary from the continent of America." He thus insinuates that his delineation of the shores round the Pacific was founded on something better than mere caprice. Yet in the Venetian maps which immediately followed, the two continents are again united. In all these maps we find the *Terra Australis adhuc inexplorata*, or southern land as yet unexplored; and the first printed map in which more positive indications occur in this quarter appears to be that executed by Fernando Bartoli in 1571. In this we find the *Terra incognita discuoperta di Nuovo*, or lately discovered, situated to the south of New Guinea and the Spice Islands, or corresponding with the general situation of New Holland.

In this, as in other early maps, the *Terra Australis* is represented as one great continent, filling the antarctic regions; but Bartoli has named some portions of it as if he had received information of land in those directions. Thus, to the south of the Cape of Good Hope is a promontory named *Terra de Vista*.

Notwithstanding the great increase of geographical information, even the best maps were long deficient in correct distances, particularly in longitude. South America is represented by Fischer as 62 degrees, or near 4500 miles across; while North America, in the same map, extends from the mouth of the St. Laurence on the east, to New Albion on the west, through a space of 150 degrees, or above 9000 miles. Here also we find California again represented as an island, an error which is repeated in many maps executed at the commencement of the eighteenth century; and in some of them the north-west coast of America is represented as running westward in the parallel of 42°, till it nearly meets Yedzo; it is then marked as doubtful. It is remarkable that in some of these maps we find the south coast of New Guinea delineated, though at a later period that island was supposed to be connected with New Holland. The Terra Australis, or antarctic continent, which De Witt banished from his maps, was restored by Sanson in the beginning of the last century; so slow and fluctuating was the progress of accurate geography. Hondius, in 1630, ventured to abridge Asia of the undue dimensions given to it by Ptolemy, and to reduce its extension towards the east to 165°. But his example was not followed, and many instances might be adduced in which the authority of Ptolemy, who was but slightly acquainted with one half of the globe, was blindly submitted to in an age when Europeans wandered over its entire surface.

As scientific knowledge advanced, hopes were entertained that the longitudes of places might be fixed by observing the eclipses of the sun and moon; but this method proved, on experience, to be so pregnant with

error that astronomers were again reduced to despair. A grand step, however, was made towards the attainment of their wishes, when in 1610 Galileo discovered the eclipses of Jupiter's satellites. In 1631 that great man proposed to the king of Spain to apply his discoveries for the purposes of navigation and geography. The supineness of the Spanish court was not calculated to foster his zeal; but the Dutch embraced his offer, and sent Hortensius and Blaew to study under him at Florence. Yet the defects of telescopes, and the mistakes of his followers, long stood in the way of that improvement which must otherwise have been the immediate consequences of Galileo's discoveries. At a time when some astronomers imagined that they saw no fewer than twelve satellites round Jupiter, no satisfactory conclusions could be drawn from the observation of that planet. Until Cassini published his tables in 1668 nothing accurate was known respecting the eclipses and revolutions of Jupiter's satellites. Shortly afterwards, however, (in 1671,) Picard went to Uraniburg in Denmark, to the observatory of Tycho Brahe, to observe according to the advice of Cassini. He was thus able to calculate, with an accuracy hitherto unknown, the difference between the longitudes of the observatories at Uraniburg and Paris.

In consequence of this successful experiment, MM. Picard and Delahire, both academicians, were immediately employed to examine and to correct the map of France by astronomical observations. In executing this task, they were obliged to contract France within much narrower boundaries than it was supposed, according to the maps of that time, to occupy. They reduced it above 1° of longitude along the western coast from Britany to the Bay of Biscay, and in the same manner they cut away about half a degree from the shores of Languedoc and Provence. These changes gave rise to a jest of Louis XIV., who, when complimenting the academicians on their return, told them "he was sorry to observe that their journey had cost him a large portion of his kingdom."

Cassini, in the mean time, laboured indefatigably in endeavouring to improve geography, by allying it strictly with astronomy. He drew, in 1696, a planisphere on the floor of the observatory at Paris, on which he marked thirty-nine positions determined by recent observations. He vehemently reproached the learned world with the defects of geography, which in the march of science still lingered considerably in the rear. Map-makers paid no attention to the astronomical observations which were multiplied round them every day, and which, though far from exact, never deviated into such errors as those which were handed down traditionally from the antients. By his desire Chazelles was sent to the Levant, to correct the map of the Mediterranean: his observations ascertained the difference in longitude between the shores of Palestine and the meridian of Paris. The map of the portion of the Mediterranean which lies to the west of this meridian was not corrected till 1720. It is remarkable that Peiresc, in 1635, had reduced the distance from Aleppo to Marseilles from 45° to 30°. But the learned did not universally accede to those improvements proposed by individuals of eminent abilities. While Newton taught the laws which regulate the movements of the earth among heavenly bodies, little care was taken to delineate its surface. Geography continually relapsed to the errors of antiquity, and needed, as Cassini loudly complained, a total reform.

William Delisle, the friend of Cassini, was the first who seriously set about the task of reconstructing the geographical edifice. He conceived his grand design when young, and applied himself to it with such uncommon ardour that he had finished the task at the age of twenty-five. In the year 1700 he published his map of the world, as well as separate maps of Europe, Asia, and Africa. In these he boldly departed from the examples of his predecessors, and made free use of the materials which the improvements in astronomy had placed within his reach. The defects of geography in his age belonged to the original vice of its system, and

not to any deficiency of materials: it had been already enriched, and in every way improved, by the industry of Sanson, the learning of Ortelius, and the cleverness of Mercator. But Sanson, though the first geographer of the seventeenth century, still remained far behind the astronomical discoveries of the time. He followed blindly the longitudes of Ptolemy, and his sons and grandsons after his death continued to reproduce his maps, without paying any attention to the observations that were daily increasing. The maps of Coronelli and others, notwithstanding their reputation, were inferior to those of Sanson. In order to improve geography it was necessary to combine the narratives of travellers with the results of astronomical observations. This had been partially and ineffectually attempted before by Riccioli, Hondius, and others. But these previous revolts of reason against authority do not diminish the glory redounding to Delisle, from the revolution which he effected in geography: for he proved himself to accord with both ancient and modern measures; he combined a greater mass of materials, and instead of confining his corrections to one quarter of the globe, he proceeded through the whole; hence he has a good right to be considered the creator of modern geography. Peter the Great, when in Paris, condescended to visit him, and to give him what information he possessed respecting the geography of Muscovy.

Delisle died in 1726, but he lived to see his disciple J. B. d'Anville attain such eminence in his favourite study, as promised to bring geography to a speedy perfection. The talents of D'Anville procured him, at the early age of twenty-two, the honour of being appointed the king's geographer. He was remarkable for a singular correctness of judgment, and fineness of penetration, which appeared almost instinctive. He proceeded much on conjecture, and yet he rarely erred. The researches of the learned, and the increased acquaintance made with the globe within the last century, both bear witness to the sagacity of his spirit. Italy, before his time, was en-

larged in the maps far beyond its true dimensions, and extended from west to east, according to the ideas of the ancients. But he ventured to reduce it, having previously discovered the true measures of the ancients; and the geodesical operations of Benedict XIV. showed him to be correct. His boldness completed what the resolution of Delisle had begun.

If the glory of reforming the inveterate errors of geography belongs in a peculiar manner to the French nation, the English at least had the merit of affording the most important elements to the laborious task. The discoveries of Newton did not terminate merely in the improvement of astronomy; they communicated, of course, an impulse to every branch of knowledge at all connected with that science. But his disciple Halley exerted a more immediate influence on geography. This extraordinary man, like D'Anville, distinguished himself at a very early age by his remarkable proficiency in his favourite study. At the age of nineteen, he published a direct method of finding the aphelia and eccentricity of the planets. He was aware that astronomy depended on an extensive knowledge of the position of the stars, and expressed his zealous desire to observe the stars in the southern hemisphere. Charles II. favoured his zeal; and in 1676, when Halley was only twenty years of age, he embarked for St. Helena, on this important mission. He remained there a year; and, during that time, from the fault of the climate, he had fixed the places of only 350 stars. Had he chosen the Cape of Good Hope he would have found a clearer sky, as well as a more southern position.

While Halley was at St. Helena he observed a transit of Mercury across the sun's disc. This kind of phenomenon had already attracted the notice of Gassendi, Horrox, and other great astronomers; but Halley was the first to see all the important consequences that might be derived from it. He perceived that it might serve to determine the parallax of the sun, whence again might be calculated the dimensions of the solar system.

The passage of Venus across the sun, which is of more rare occurrence, seemed to him at the same time to offer superior advantages. He weighed attentively and arranged the methods and consequences of these observations; and, in a memoir published in 1716, he announced to the learned world that the transit of Venus would afford the means of calculating the distance of the earth from the sun with greater precision than had been yet expected. The last time this phenomenon had taken place was in 1639, and it was not to recur till 1767; a time to which Halley, who was born in 1656, could not hope to have his life prolonged; he therefore exhorted other astronomers to attend to his admonitions. His counsel has been obeyed, and his expectations fulfilled. Besides the advantages directly accruing to geography from the perfection of astronomical science, the observation of the transit of Venus, so warmly and prophetically urged by Halley, has a peculiar interest, inasmuch as it gave rise to the first voyage of Cook, which contributed so much to dispel the obscurity which hung over our knowledge of the globe.

But it is not merely by his remote influence on geographical exertions that Halley is entitled to our respectful notice; he figured prominently also as a navigator and hydrographer, and was among the first to lay the foundations of physical geography. His "Theory of Magnetic Variations," with his "History of the Monsoons, or the Periodical Trade Winds," having attracted the attention of the learned, the king gave him a vessel to examine the Atlantic, and to try how far his theory was conformable with experience. He embarked on this expedition in 1698, with a captain's commission; but as he had not been educated in the navy, he was viewed by his officers with jealousy and dislike, and the mutiny of his lieutenant compelled him to return soon after he had passed the line. He again put to sea, however, in 1699, and proceeded to the south till he met ice, in lat. 52°. In September, 1700, he returned, not having lost a man in the course of his voyage; a circumstance

at that time of rare occurrence, and which can be attributed only to the care and humanity of the commander. His observations during both his voyages were found to be favourable to his theory of magnetic variations. Captain Halley was employed on his return to survey the Channel, and was soon after sent on a mission to the Adriatic and to Vienna. This extraordinary man died in 1742, at the age of eighty-six, retaining his faculties unclouded till the last. His long life was throughout devoted to the advancement of science: his habitual industry was equal to the activity of his mind. He was at once a strict reasoner and a bold speculator; he had no morbid fear of theories, nor was he ever weaned by his attachment to them from his love of truth. He knew from experience how much navigation depended on astronomy, and laboured hard to make the latter subservient to the purposes of the former. He attempted to improve the theory of lunar motions; and, though not perfectly successful, he did as much as could be expected from one man. What he commenced La Place has completed. These are the exertions for which navigation and geography are indebted to the genius of Halley; but his fame as an astronomer rests chiefly perhaps on his application of the Newtonian laws to the motions of comets, and on his calculations respecting the precession of the equinoxes.

Having thus briefly sketched the progress of geography towards mathematical correctness, and its alliance with the kindred science of astronomy, it may, perhaps, illustrate still farther the gradual dissipation of error, if we cast a passing glance at the last advocate for a great southern continent. Although there is nothing intrinsically absurd in the supposition that land extends for a great distance round the South Pole, yet the belief in the necessity of an antarctic continent, in order to establish the equilibrium of the earth, and the credulous and even disingenuous attempts to support this hypothesis by fragments of authors of imperfect authenticity, may safely be reckoned among positive errors. Alex-

ander Dalrymple sailed to India, 1737, in the service of the company: he afterwards visited the eastern archipelago; and, while studying the history of those interesting countries, the trade or the possession of which was eagerly coveted by his employers, he contracted a strong partiality for geographical researches; but, with the information which he obtained from the earliest Spanish navigators, he also imbibed their credulity, and at length firmly believed in the existence of a southern continent teeming with wealth and abundance. In compensation for his services in the East, he was appointed, on his return home, hydrographer to the East India Company; and was afterwards named hydrographer to the Admiralty, when that office was first created, in 1795.

But previous to that period, in 1772, Dalrymple wrote to lord North, who was then prime minister, to inform him that he was about to embark on an expedition at his own expense to discover a southern continent, and hoped that government would allow him to retain for five years all the countries which he should discover in the southern Atlantic between the longitudes 0° and 60° west of Greenwich, on condition that this grant should comprehend only those lands or islands examined within five years, and of which plans should be delivered in. Lord North took no notice of this application until urged by repeated letters; but at length he gave Dalrymple an audience, in which, however, the latter complained that the conversation turned more on the politics of the East than on geographical discoveries: the minister eluded the demands of Dalrymple by urging the necessity of consulting his colleagues.

It is probable that, in the course of conversation, lord North was led to form an unfavourable estimate of Dalrymple's understanding, and was unwilling to risk the reputation of government by patronising the schemes of a flighty enthusiastic projector. Dalrymple, however, was so sanguine in his hopes of finding a southern continent adapted for colonisation, that he went to the

trouble of composing a code of laws for his embryo republic: the general character of these is such as to justify the coldness he experienced from lord North. According to his scheme women were not to be debarred from public offices; but, in the exercise of public duties and political rights, were to be on an equal footing with the men. No one in his republic was to exercise the profession of the law for hire or fee, on pain of forfeiture of all his property and perpetual imprisonment. The public accounts were to be exposed to general inspection on every Sunday in all the churches. To prevent luxury, no coin was to be used but copper money. Bachelors and maidens were to be heavily taxed; the sums thus raised being to go to the support of orphans. Finally, no one was to be admitted into the colony who did not subscribe to this code of laws, and on his dissenting from any of them he was to forfeit all his property. Thus a republic devised expressly as a model of a free state was to be debarred from the power of legislation, and to be supported by that grand pillar of barbarism, an unalterable code. Well might a friend of Dalrymple's pronounce upon his scheme, that it was the best possible model of the worst possible commonwealth. From these observations it is evident that the talents of Dalrymple would have but ill supplied the place of the sound sense and correct judgment of Cook, whose post he had nearly occupied in the expedition undertaken to observe the transit of Venus.

CHAP. II.

VOYAGES OF BYRON, WALLIS, CARTERET, ETC.

MOTIVES OF THE FRENCH TO MAKE GEOGRAPHICAL DISCOVERIES. — THE FALKLAND ISLANDS. — APPEARANCE OF FORESTS. — TAMENESS OF GAME. — SETTLEMENT MADE BY BOUGAINVILLE. — VOYAGE OF COMMODORE BYRON. — HIS INSTRUCTIONS. — SEARCH FOR PEPYS ISLAND. — INTERCOURSE WITH THE PATAGONIANS. — PORT EGMONT. — ISLANDS OF DISAPPOINTMENT. — KING GEORGE'S ISLANDS. — TINIAN. — WALLIS AND CARTERET. — THEIR SEPARATION. — WALLIS ARRIVES AT OTAHEITE. — CONDUCT OF THE NATIVES. — CARTERET DISCOVERS PITCAIRN'S ISLAND. — THE SOLOMON ISLANDS. — NEW IRELAND. — THE FALKLAND ISLANDS SURRENDERED TO SPAIN. — VOYAGE OF BOUGAINVILLE ROUND THE WORLD. — ANECDOTE OF BARÉ. — THE NEW CYCLADES. — LOUISIADE.

When George III. ascended the throne of England, civilisation and knowledge had made so great a progress as to give the interests of science some weight even in the calculations of politicians. The young monarch himself had conceived a strong partiality for geographical studies, and his desire to distinguish his reign by the glory of important discoveries was encouraged by his ministers from motives of a less disinterested nature.

During the wars which had lately agitated Europe, the privateers of the hostile nations cruising in the south seas had woeful experience of the hazardous character of that distant navigation. The French, having suffered much from the maritime superiority of the English, and having been totally expelled from their settlements in Canada, began to look about them for some mode of counterbalancing these losses, and of securing their mercantile interests in case of a future war. The establishment of a colony, at the Falkland Islands, which might serve as a resting place for ships destined to the Pacific Ocean, was some time in contemplation. The cruisers

from St. Malo having named those islands *Malouines*, from their native town, seemed to have thereby established a vague kind of right to the possession of them.

In 1763, M. de Bougainville, an officer who had served with distinction in the wars of Canada, undertook to make a settlement on these islands at his own expense. The French government accepted his proposal, and, accordingly, on the 15th of September in that year, he sailed from St. Malo, carrying out with him as settlers some of those unfortunate persons who, by the success of the British arms in North America, had been driven from their possessions in Nova Scotia, or Acadia as it was named by the French. On the 3d of February, 1764, he entered a great bay, at the eastern extremity of the Falkland Islands, to which he gave the name of *Baie des François*. He found that the appearance of wood, which had imposed on both sir Richard Hawkins and Woodes Rogers was quite delusive. Tufts of high reeds, separated by narrow intervals, covered the low lands. The stalks of these reeds had the colour of dry leaves, to the height of about six feet, and were covered above that with shoots of a fresh green colour, so that the whole, at a little distance, had the appearance of a coppice wood. Fish and game were in abundance; and from the absence of timidity in the animal creation it was obvious that they had not been before disturbed by the visits of man. The birds allowed themselves to be taken with the hand; the hares and foxes were equally devoid of fear. On the 17th of March, the colony was founded; and three weeks afterwards Bougainville set sail for France, leaving behind him in his new settlement twenty-seven persons, of whom five were women. Returning to the infant colony in the beginning of the following year, he found all well, and then sailed to the Straits of Magellan for a supply of wood; thus commencing the commercial intercourse with those southern regions which it was the chief object of the colony to maintain. At the close of the year, the colonists, who now amounted to 150, sent home to France a cargo of

oil and seal-skins, as a presage of the advantages likely to result from their prosperity.

These enterprises of the French may naturally be supposed to have excited jealous feelings in the English government; and a desire to undertake some countervailing project is manifest in the plans of discovery encouraged by the court. In 1764, commodore Byron was commissioned to sail on a voyage of discovery, the objects of which are briefly and distinctly stated in his instructions, as follows: —

"Whereas nothing can redound more to the honour of this nation as a maritime power, to the dignity of the crown of Great Britain, and to the advancement of the trade and navigation thereof, than to make discoveries of countries hitherto unknown; and whereas there is reason to believe that lands and islands of great extent, hitherto unvisited by any European power, may be found in the Atlantic Ocean, between the Cape of Good Hope and the Magellanic Strait, within the latitudes convenient for navigation, and in the climates adapted to the produce of commodities useful in commerce; and whereas his majesty's islands, called Pepys Island and Falkland's Islands, lying within the said track, notwithstanding their having been first discovered and visited by British navigators, have never yet been sufficiently surveyed, as that an accurate judgment may be formed of their coasts and products: his majesty, taking the premises into consideration, and conceiving no conjuncture so proper for an enterprise of this nature as a time of profound peace which his kingdoms at present happily enjoy, has thought fit that it should now be undertaken."

The ships fitted out for this voyage were the Tamar, a sloop, mounting 16, and the Dolphin, a small man-of-war, mounting 24 guns. The latter vessel was sheathed with copper; a circumstance which deserves to be remarked, as this was one of the first and most important experiments made by the English admiralty to determine the efficacy of that mode of preserving ships' bottoms

from the attacks of worms. Copper sheathing had been recommended to the admiralty so early as 1708; but so difficult is it to alter the routine of practice, and so surely does prejudice rise in opposition to every thing that is new, that in admiral Keppel's fleet, in 1768, there was but one ship coppered.

The ships arrived at Rio Janeiro about the middle of September, and, after remaining there about a month, again put to sea. Their destination had been hitherto a secret, but, on leaving the coast of Brazil, the commodore called all hands upon deck, and informed the men that they were not bound to the East Indies, but upon a voyage of discovery; and that, in case of their good conduct, they were entitled to double pay. This announcement was received by the crew with acclamations of joy; nevertheless they soon had a foretaste of the hardships which they were destined to encounter. At Rio the men had been greatly incommoded by the heat, and supposing that their voyage was to be through hot climates, they had sold all their warm clothing; but, after holding their course to the south for one week, they experienced an inclemency of weather which rarely occurs in the severest English winter: yet they had not advanced beyond 36° south, and it was now the summer season in those latitudes. Their first shelter was in Port Desire, which was found to have been but confusedly described by sir John Narborough. The country round was a bleak desert, resembling in appearance the downs in the south of England. Some hares were caught, the flesh of which was as white as snow.

On leaving Port Desire, Byron sailed in search of Pepys Island, laid down by Cowley in 47° south latitude; but after cruising four days to no purpose, being now certain that there was no such island, he returned to the main land to take in wood and water. During this part of the voyage the weather was, in general, fine, but very cold; and it was agreed by all on board, that the only difference between the middle of summer there and the middle of winter in England lay in the length

of the days. The ships now entered the Straits of Magellan, and had hardly come to an anchor when they saw a number of horsemen on the shore waving something white, as if inviting them to a conference. Byron immediately proceeded to land, with a well armed party. Leaving his people upon the beach, in readiness to act as occasion might require, he advanced alone towards the natives, who, though above 500 in number, seemed alarmed at his approach. At length, by signs and expressions of friendship, he induced one of them, who appeared to be a chief, to venture towards him. "This man," says the commodore, "was of a gigantic stature, and seemed to realise the tales of monsters in human shape. He had the skin of some wild beast thrown over his shoulders as a Scotch highlander wears his plaid, and was painted so as to make the most hideous appearance I ever beheld. Round one eye was a large circle of white, a circle of black surrounded the other, and the rest of his face was streaked with paint of different colours. I did not measure him; but if I may judge of his height by the proportion of his stature to my own, it could not be much less than seven feet." The Patagonians, however formidable their appearance might be, were found remarkably tractable and civil. They accepted such presents as were offered to them with thankfulness, betraying neither indifference nor importunity; and Byron, having looked round upon these "enormous goblins" with no small astonishment, left them well satisfied with his visit, and willing, as he judged by their signs, to show him the full extent of their hospitality.

The ships now advanced up the straits as far as Port Famine, where our voyagers found the country decorated with a luxuriance that seemed foreign to the climate. The ground was covered with flowers, not inferior to those cultivated in the gardens of Europe either in beauty or fragrance. The favourable language in which commodore Byron speaks of the Magellanic regions seems intended to flatter some scheme of settlement; for

he adds, "and if it were not for the severity of the cold and winter, this country might, in my opinion, be made by cultivation one of the finest in the world." Having completed the wood and water of both ships, he steered back again from the straits in search of Falkland's Islands.

Soon after his arrival at these islands, he discovered a harbour on the western coast, to which he gave the name of Port Egmont, and which appeared to him one of the finest harbours in the world. The whole navy of England might ride within it in perfect security from all winds. Here the country was taken possession of by the name of Falkland's Islands; a precaution which the language of his instructions appears to have rendered unnecessary.

Having thus completed his instructions, so far as related to those islands, he proceeded on his voyage to the South Sea, which he determined to reach by the Straits of Magellan. Having accompanied lord Anson in his voyage round the world, Byron appears to have regarded with unbounded dread the passage by Cape Horn. In the straits, nevertheless, he had to contend with the usual difficulties: his voyage through them occupied about seven weeks, during which time his crews enjoyed little rest, and the uncertainty of the climate threatened continual danger. His intercourse with the wretched inhabitants of this forlorn country was not productive of any interesting results. They were found, however, to derive much pleasure from music; and when amused in this way by some of the crew, testified their gratitude by painting the fiddler's face after the fashion of their country. At length, on the 9th of April, the ships cleared the strait, and entered the South Sea. "It is probable," observes commodore Byron, "that whoever shall read this account of the difficulties and dangers which attended our passage through the Straits of Magellan will conclude that it ought never to be attempted again; but I, who have been twice round Cape Horn, am of a different opinion. I think that, at a proper season of the

year, not only a single vessel but a large squadron might pass the straits in less than three weeks." The voyage of sir Francis Drake is the only one which can be adduced in support of this opinion. Byron ascribed the hardships which he had to endure from the tempestuous weather to the circumstance of attempting a passage during the vernal equinox. But from the experience of numerous navigators, it may be questioned whether this region of the globe ever enjoys a tolerable respite from storms and hurricanes.

The crews of both vessels being completely worn out by their sufferings in the straits, it was deemed advisable to steer for Juan Fernandez, as the nearest resting place, and to postpone the prosecution of discoveries till the health of the men should be restored. But this island was missed from the haziness of the weather, and it was therefore necessary to sail to Masafuero, some degrees farther to the west; but here again the wearied mariners were disappointed in their hopes of finding a resting place. The sea ran high, and broke upon the shore in such a dreadful surf, that it was found extremely difficult to effect a landing. A little water, however, was procured, and the ships were obliged to continue their voyage. Byron attempted also to find Davis's or Easter Island, but without success. The scurvy was now making its ravages among the crews, and heightened the natural impatience of a protracted voyage. At length a small island was discovered, of a most beautiful appearance. It was covered with tall trees, and upon the shore were seen the shells of turtle, scattered in profusion. The inhabitants ranged themselves along the beach to survey the ships, and lighted numerous fires as if for signals. But so many pleasing objects thus presented to the eyes of the seamen only increased their misery, and prompted the imagination to exercise the power which it possesses of aggravating the calamities of life. No anchorage could be found near the island, which was surrounded by coral rocks; it was therefore impossible to remain here. On the following

day another small island was discovered, similarly situated. Cocoa nut trees were seen in abundance, but no anchorage could be found. The sick, who were now in a deplorable situation, were still further depressed on finding that the land presented to their view was inaccessible. These islands were therefore left, having received the name of the *Islands of Disappointment*.

On the next day, however, other islands were discovered, from which, notwithstanding the equivocal conduct of the natives, the boats were able to carry off several loads of cocoa nuts, and a great quantity of scurvy grass, the most valuable refreshments which could have been procured. The natives, though at first disposed to view the strangers as enemies, were not without sentiments of kindness and generosity. A midshipman, who testified his confidence in them by swimming with his clothes on through the surf to the shore, was minutely examined, and indeed stripped of some articles of apparel by the inquisitive Indians, but no violence of any kind was offered to him. Some remnants of a Dutch long-boat, with fragments of brass and iron implements, were found here in a hut. To this small group Byron gave the name of *King George's Islands*. In the remainder of the voyage to Tinian, commodore Byron was prevented by the sickly state of his crew from examining the islands which he descried, with the patience and attention that would be expected from a navigator under more fortunate circumstances. The difficulty of finding good anchorage, and the necessity of avoiding any unnecessary delay, compelled him to pass by Prince of Wales's Island, and the Archipelago, which he named the Islands of Danger, with little or no examination. At length, in the beginning of August, he arrived at Tinian, and anchored in the same harbour which had formerly afforded shelter to lord Anson. To Byron and his company, however, this island did not present that enchanting appearance which had won from their predecessors such rapturous descriptions. After remaining here nine weeks, during which time the sick

were pretty well recovered, and having laid in a stock of 2000 cocoa nuts, the ships again put to sea, and in about six weeks arrived at Batavia. Having again refreshed here, they set sail for England, where the commodore arrived in the beginning of May, having been somewhat more than two and twenty months on the voyage.

Commodore Byron returned in May, 1766; and in the month of August following, the Dolphin was again sent out, under the command of captain Wallis, together with the Swallow, captain Cartaret, in the prosecution of the same general design of making discoveries in the southern hemisphere. On his arrival in the Straits of Magellan, captain Wallis despatched a store-ship, which had accompanied him so far, with some thousand young trees, taken to be transplanted to the Falkland Islands, where a British colony had been just established, so that this expedition does not appear to have been wholly without some views of settlement, any more than the preceding. Though captain Wallis arrived in the straits at the season recommended by Byron, he was nevertheless four months endeavouring to effect his passage through them: so little reliance can be placed on the constancy of the seasons in such a tempestuous climate. He at length effected his entrance into the South Sea, on the 11th of April, 1767. But the Swallow, being a heavy sailer, was unable to clear the straits at the same time, and returned to Europe by a different route, as the two ships never afterwards joined company. Captain Wallis, in his voyage across the Pacific, ranged through the archipelago of the Georgian Islands, and named several, as Queen Charlotte's, Egmont, Gloucester, and Osnaburgh, Islands, of which he considered himself the first discoverer. At length he arrived at an island of considerable size, to which he gave the name of *King George the Third's Island*, but which is now better known by the native name of Otaheite. The crew being sickly, he deemed it expedient to remain here some time to procure refreshments; but although the natives were hos-

pitable and friendly, it was difficult to establish a cordial correspondence between parties so unequal in power and intelligence. It was impossible to do away with all symptoms of fear and mistrust on the one side, and the disposition to behave tyrannically on the other. In the combats which took place, the natives experienced the dreadful effects of fire arms, and the dangerous superiority of their European visitors. Captain Wallis, prompted by a wanton desire to exhibit his powers of destruction, directed some balls to the woods, to which the women and those incapable of bearing arms had retired; and, in order to disable the natives from giving him any further disturbance, he destroyed above fifty of their large or war canoes. But these quarrels did not wholly alienate the affections of the natives. They still regarded the strangers, in the intervals of peace, with the warmth of affection, which spoke abundantly the simplicity of their hearts. A female of rank, named Oberea, whom our navigators considered as the queen of the island, was unremitting in her attentions to captain Wallis, to whom she was personally attached, and seemed inconsolable at his departure.

From Otaheite captain Wallis sailed to Tinian, where he repaired the ship, and refreshed his crew; and having touched at Batavia and the Cape of Good Hope, arrived at Hastings, the 19th of May, 1768, having been about one year and nine months on the voyage.

In the mean time captain Carteret, in the Swallow, having lost sight of the Dolphin at the western entrance of Magellan's Straits, had to encounter numberless dangers and distresses when left to perform a long and difficult navigation in a ship inadequately provided, and not at all fitted for such an expedition. He cleared the straits four days later than captain Wallis, and crossed the Pacific by a route a little farther to the south. After leaving Masafuero, in lat. 25° 2′ S., a lofty island was seen, which, from the name of the young officer who discovered it, was named Pitcairn's Island. Carteret hoped to fall in with the Salomon Islands, and in

reality he must have approached them very closely; but having failed to verify the discoveries of Spanish navigators, he incautiously ventured to doubt their veracity. The island to which he gave the name of *Egmont Island* was probably the Santa Cruz of the Spaniards; and his *Gower Island* is at no great distance from the principal of the Salomon group. On arriving at New Britain, in the inlet to which Dampier had given the name of St. George's Sound, he was tempted to believe that it conducted into an open sea, and, venturing through it, discovered that Nova Britannia, which Dampier had first demonstrated to be separated from New Guinea, was itself divided by a channel, which he named *St. George's Channel.* To the northernmost island Carteret gave the name of *New Ireland.* The island to the south remained in possession of the title under which the whole had before been vaguely comprehended. Leaving St. George's Channel, he determined the positions of many of the islands with which these seas abound. The distressed situation of his crew compelled him to remain some time at Macassar, the Swallow being the first English ship of war that ever touched at Celebes.

The preceding expeditions were all more or less connected with the project of forming establishments in the Falkland Islands. But these colonies were soon found to be not worth the trouble and expense which they incurred. The English, we have before observed, made a settlement at Port Egmont in 1766. But this colony appears to have met with no further attention, and soon disappeared. Captain Macbride, in the Jason frigate, who surveyed those islands in the same year, threatened the existence of the French colony in *Baie des François*, on the eastern coast. But Spain now interposed, and claimed the Falkland Islands by virtue of the old papal grant, the authority of which had long since fallen into contempt. France, however, chose rather to relinquish a worthless possession than to engage in war on its account. The king of Spain agreed to pay 500,000 crowns as an indemnification for the ex-

pences already incurred in settling the country. Part of this sum was to go to Bougainville, the first projector and chief proprietor of the colony. He was accordingly despatched in 1766 with the Boudeuse, of 26 guns, and the Etoile storeship, to make formal restitution of these islands to the Spanish crown, and with instructions to return home through the Pacific Ocean with the view of making geographical discoveries. As the French had been recently deprived of their colonies in North America, they were anxious to find some new channels in which their enterprising spirit might be advantageously employed. Bougainville, who had personally witnessed those political reverses, was as well qualified by the activity of his mind as by his knowledge and experience to guide the French merchants to those remote seas where they might hope to remain undisturbed by political rivalry.

In November, 1767, having resigned the Falkland Islands, and repaired his ships in the La Plata, he commenced his voyage towards the Pacific. His great reputation, and the interest excited by the object of his voyage, procured him the company of the Prince of Nassau and of the naturalist Commerçon. His passage through the Straits of Magellan was effected in 52 days; and though he had to struggle with continual storms, he seems to prefer the passage by the straits to that round Cape Horn. He failed, like Byron and Carteret, in his attempt to find Easter Island, but at length arrived at a group with which those navigators were not wholly unacquainted, and to which he gave the name of *Archipel Dangereux*. These are the *Paumotu* or Pearl Islands of the English charts. But his first resting place was the island to which Wallis gave the name of King George the Third's Island, and of which the French navigator correctly ascertained the native name, *Tahiti*. Here he experienced the same kind treatment as the English who had preceded him; and, health being restored among his crew, he again proceeded on his

voyage. An intelligent native, named Aootooroo, was induced to accompany him to Europe.

Commerçon the naturalist had a young servant, remarkable for his mild and patient disposition; but the discriminating Tahitians, as soon as they set their eyes upon him, exclaimed that he was a woman: suspicions were thus directed towards Baré, as the young servant was named; and the ship was not long at sea after leaving Tahiti, when, being teased continually by the crew, she was obliged to avow her sex. The female who had thus engaged in an enterprise, of the hardships of which she could form no conception, and who embarked in disguise to circumnavigate the globe, with hardly any other motive than the gratification of curiosity, was about 27 years of age, and not ill looking. Her fortune would have been truly singular, as M. Bougainville remarks, if the ship in which she sailed had been thrown away on some desolate island.

Bougainville next arrived at a group of islands, to which he gave the name of *Les Grandes Cyclades*, and which seem to have formed the Terra Australis of Quiros. But the French were unable to establish any intercourse with the natives, whose dispositions were as hostile as their appearance was forbidding. They were almost all affected with the leprosy, from which circumstance one of the islands received its name. Continuing his course to the west, and afterwards to the north, he discovered a great island or archipelago, which he named *Louisiade*. Still farther to the north he sailed along the eastern coast of another island, to which he gave his own name. He shortly after anchored near the southern extremity of New Ireland, at the mouth of King George's Harbour; but instead of investigating this inlet, which Carteret discovered to be a strait, he followed the land to the east and north; and after being at sea for ten months and a half, arrived at Batavia on the 28th of September. On touching at the Cape of Good Hope he learned that captain Carteret was only eleven days before him. But the Swallow, being in a wretched condition, was soon

overtaken; the two navigators corresponded with so much jealousy and reserve, that each endeavoured to conceal from the other the fact of his having circumnavigated the earth. Bougainville arrived at St. Malo on the 16th of March, 1769, after a voyage of two years and four months.

CHAP. III.

COOK'S FIRST VOYAGE.

EARLY LIFE OF COOK. — HIS FIRST PROMOTION IN THE NAVY. — SURVEYS THE ST. LAWRENCE. — APPOINTED TO SURVEY NEWFOUNDLAND. — HIS PROFICIENCY IN MATHEMATICS. — TRANSIT OF VENUS. — INTRACTABILITY OF DALRYMPLE. — COOK CHOSEN IN HIS STEAD. — PORTUGUESE IGNORANCE. — ATTEMPT TO EXPLORE TIERRA DEL FUEGO. — ARRIVAL AT OTAHEITE. — THE TRANSIT OBSERVED. — CHARACTER OF THE PEOPLE. — TUPIA SAILS WITH COOK. — THE SOCIETY ISLANDS. — TRADITIONS RESPECTING EUROPEAN SHIPS. — GEOGRAPHY OF THE NATIVES. — OHITEROA. — THE EASTERN SHORES OF NEW ZEALAND DISCOVERED. — SOME NATIVES CAPTURED. — FOUND TO BE CANNIBALS. — THEIR ARTS. — A LARGE RIVER EXPLORED. — QUEEN CHARLOTTE'S SOUND. — COOK'S STRAITS DISCOVERED. — NEW ZEALAND CIRCUMNAVIGATED. — THE EAST COAST OF NEW HOLLAND. — BOTANY BAY. — NARROW ESCAPE FROM SHIPWRECK. — ENDEAVOUR STRAITS DISCOVERED. — POSSESSION TAKEN OF NEW SOUTH WALES. — DEATH OF TUPIA. — RETURN OF COOK.

THE interests of science and the acquisition of geographical knowledge entered largely into the motives of the circumnavigations above related. But the first expedition of importance, fitted out wholly for scientific objects, was that intrusted to the command of the celebrated captain James Cook. This great navigator was born of humble parents: his father was an agricultural labourer, whose steady conduct was at length rewarded by his employer with the situation of hind or under steward. As he had nine children, and his means were

slender, he was unable to assist materially their individual exertions to procure a livelihood. James, when thirteen years of age, was apprenticed to a shopkeeper at Straiths, a fishing town not far from Whitby; but the predilection of young Cook for the sea was soon manifested with that strength of inclination which is sure to accompany peculiar talents. He engaged himself for seven years with the owners of some ships employed in the coal trade; and, when the period of his engagement was expired, he was promoted by his employers to the rank of mate of one of their vessels. The coal trade of England, being chiefly carried on near a singularly dangerous coast, where unceasing vigilance is required on the part of the seamen, constitutes the best school of practical mariners in the world. Cook, who obeyed his own inclinations when he turned sailor, profited, no doubt, in the highest degree, from the opportunities which his coasting voyages afforded him of becoming acquainted with the practical part of navigation. At length, being in the Thames in 1755, when impressments were carried on to a great extent, he resolved to anticipate the impending necessity, and offered himself to serve on board the Eagle, a man-of-war of 60 guns. Shortly after, the friends and patrons of his family in Yorkshire having warmly recommended his interests to the care of Mr. Osbaldiston, the member for Scarborough, and captain (afterwards sir Hugh) Palliser, who commanded the Eagle, reporting well of his conduct and capacity, he was appointed master of the Mercury, a small vessel which soon afterwards joined the fleet of sir Charles Saunders in the Gulf of St. Lawrence. Here the talents and resolution of Cook soon became conspicuous.

It was found necessary, in order that the fleet might co-operate with the army under general Wolfe, that it should take up a position along the shore in front of the French encampments; but before this manœuvre could be put in execution, the channel of the river was to be sounded. This difficult task required the union of

more than ordinary intelligence and intrepidity, and Cook was the person selected for the purpose. For several nights he carried on his operations unperceived; but at length the enemy discovered his movements, and, sending out a great number of boats after it grew dark, attempted to surround and cut him off. Cook pushed for the Isle of Orleans; and so narrowly did he escape being captured, that as he stepped on shore from the bow of his boat, the Indians in pursuit of him entered at the stern; and the boat itself, which was a pinnace belonging to a man-of-war, was carried off by the enemy. Cook, however, had accomplished his task, and laid before the admiral of the fleet a survey of the channel, which was found to be both full and accurate. After the conquest of Quebec he was appointed to examine the more difficult portions of the river St. Lawrence, with the navigation of which the English had but little acquaintance. His zeal and abilities soon after procured him an appointment as master to the Northumberland, which bore the commodore's flag at Halifax. Here he found leisure to apply himself to the study of elementary mathematics, and to improve those talents as a practical hydrographer of which he had given such ample proofs in his first rude essays. An opportunity also soon occurred of displaying his improvement by surveying a part of the coast of Newfoundland. This island had lately fallen into the power of the English; and its importance as a fishing station being fully appreciated by sir Hugh Palliser, who was appointed governor in the year 1764, he strongly represented to government the necessity of making an accurate survey of its coasts; and, accordingly, by his recommendation, Cook was appointed marine surveyor of Newfoundland and Labrador, and the Grenville schooner was placed under his command for this purpose. The manner in which Cook executed this task confirmed the high opinion already entertained of his zeal and ability. A short paper which he communicated to the Royal Society on an eclipse of the sun observed in Newfoundland, and the longitude of

the place as calculated from it, procured him the character of a respectable mathematician.

But still higher honours awaited him. The transit of the planet Venus over the sun's disc, calculated to take place in 1769, was looked forward to by the scientific world with much anxious interest; and it was earnestly desired that all the advantage which could be derived to science from so rare a phenomenon might be secured by observing it in distant quarters of the globe. In accordance with this view, the Royal Society presented an address to the king, setting forth the advantage of observing the transit in the opposite hemisphere, their inability to fit out an expedition for the purpose, and praying his majesty to equip a vessel to be despatched to the South Sea under their direction. This petition was at once complied with. The person at first designed to command the expedition was Mr. Dalrymple, chief hydrographer to the Admiralty, and no less celebrated for his geographical knowledge than for his zeal in maintaining the existence of an Australian continent. Dalrymple had never held a commission in his majesty's navy; and the experience of Dr. Halley had proved that one so circumstanced cannot expect obedience from a crew subjected to the discipline of the navy. The pride of the profession scorns to submit to those who have not acquired their authority by passing through the ordinary routine of promotion. Dalrymple, however, refused to engage in the expedition unless with the amplest powers of a commander. The admiralty, on the other hand, were unwilling to intrust him with powers which might embroil him with his officers. Neither party would yield; and, while the affair thus remained in suspense, Cook was proposed. Enquiries were then made as to his abilities; and, as all who knew him spoke favourably of him, and great confidence is usually felt in the steady and concentrated talents of the self-taught, he was chosen to command the expedition, being first promoted to the rank of lieutenant.

It is a proof of Cook's natural strength of under-

standing, that his mind was not enslaved by habits, but that he was always ready to introduce innovations into his practice whenever they were recommended by common sense and experience. Instead of selecting a frigate, or vessel of that description, for his voyage, he chose a vessel built for the coal trade, with the sailing qualities of which he was well acquainted. He justly represented, that a ship of this kind was more capable of carrying the stores requisite for a long voyage; was exposed to less hazard in running near coasts — an object of great importance in a voyage of discovery; was less affected by currents; and, in case of any accident, might, without much difficulty or danger, be laid on shore to undergo repairs. The ship which he chose was of 360 tons burden, and named the Endeavour. No pains were spared by the Admiralty in fitting her out for the voyage; and, as the improvement of science was its main object, persons qualified to attain the desired end were appointed to accompany the expedition. Mr. Green was named by the Royal Society as the astronomer; Dr. Solander, a learned Swede and pupil of Linnæus, went as naturalist; Mr. (afterwards sir Joseph) Banks, a gentleman of large fortune, and at that time very young, who afterwards reflected so much lustre on his country by devoting a long life and ample means to the interests of learning, renounced the ease to which his affluence entitled him, and commenced his active and honourable career by a voyage round the world. Being accompanied by able draftsmen, and being himself zealously attached to the study of natural history, and amply provided with every thing conducive to the gratification of his favourite pursuit; being at the same time of a lively, open, liberal, and courageous temper, his company was no less agreeable than it was advantageous. Before the preparations were completed, captain Wallis returned from his voyage round the world; and having been advised to fix on some spot in the South Sea conveniently situated for the erection of an observ-

atory, he named Port Royal in King George the Third's Island as a place well adapted for that purpose.

Every thing being now prepared, lieutenant Cook sailed from Plymouth on the 26th of August, 1768. He touched at Rio Janeiro, where the Portuguese governor, no less ignorant than suspicious, was much at a loss to comprehend the object of the expedition; nor, after much trouble, was he able to form a juster idea of it, than that it was intended to observe the north-star passing through the south pole. It was only by stealth that Mr. Banks could go ashore, though nature seemed here to teem with the objects of his research, and brilliant butterflies flew round the ship to the height of the mast. In leaving this port, Cook, after the example of Byron, sailed over the position which had been assigned by Cowley to Pepys' Island, and finally dispelled all belief in its existence. He then directed his course through the Straits of Le Maire, to pass round Cape Horn.

The naturalists of the expedition landed on Tierra del Fuego, and, crossing a morass and some low woods, ascended the highest eminence they could descry. It was now midsummer in this region, and the temperature during the day was moderately warm, but as night approached snow fell in great quantities, and the cold became excessive. The exploring party, who had incautiously advanced too far, were unable to effect their return to the shore before sunset, and were obliged to spend the night exposed to all the inclemency of the weather, in a singularly desolate and unsheltered region. Dr. Solander, who, having travelled in the north of Europe, was well acquainted with the fatal effects of cold on the constitution, repeatedly admonished his companions to resist the first approach of drowsiness, as the sleep superinduced by cold is sure to prove fatal; but he was the first to feel the dangerous torpor he predicted, and entreated his companions to allow him to lie down and take his rest; but they, fortunately instructed by his lessons, persisted in dragging him along, and thus saved

his life. On reaching the woods in their descent, they kindled a fire, round which they spent the night, and when the sun rose they made their way to the ships; but two of the party, servants of Mr. Banks, who lay down to rest in the snow, were found dead the next morning.

The voyage round Cape Horn into the Pacific occupied thirty-four days; and Cook, who was rather fortunate in his weather, seems to think it preferable to the passage through the Straits of Magellan. In his voyage through the ocean, he descried some small islands, of the group which had been previously visited by Wallis and Bougainville. He proceeded, however, direct to the place of his destination, not allowing himself to be detained by unimportant discoveries. At length he arrived at King George the Third's Island, to which he found that the natives gave the name of Otaheite, and anchored in *Matavai*, or Port Royal Bay. From the inhabitants he met with the most friendly reception, and being instructed by the errors of his predecessors, he drew up a set of regulations to guide his people in their intercourse with the natives, which reflect the highest honour on his good sense and humanity. He changed names with the chief of the island; thus solemnly professing friendship according to the custom of the South Sea islanders. Permission was easily obtained to erect tents on shore for the sick; a small fort was constructed, and the observatory set up. As the time approached for the observation of the transit, the greatest anxiety existed among the officers respecting the result, as a temporary cloudiness or unfavourable change of weather might totally frustrate the grand object of the expedition. A party, however, was prudently sent to Eimeo, a small island about twenty leagues distant, and another was stationed in Otaheite, considerably to the west of Matavai Bay, in order to lessen, by the number of observers, the chances of a total failure. At length the important day, the 3d of June, arrived, and the sun rose without a cloud. The observation was made successfully by all

the parties, and the minds of our voyagers were relieved, the chief object of their mission being thus happily fulfilled.

The mild and judicious conduct of Cook completely won the confidence of the Otaheitans, and enabled him to form a more accurate opinion of their character than the voyagers who had previously visited their island. They were remarkably friendly and affectionate, and indeed their attachments alone seemed exempted from the characteristic levity which prevented them from fixing their attention on the same object for any length of time. They are a handsome people, finely made, and with open vivacious countenances: their ingenuity was in nothing more conspicuous than in the fine cloth, or rather paper, which they made of the inner bark of a tree. The garments of this material, which they wore, were becoming, and even elegant, and were arranged by the women so as to produce an effect little short of the classic draperies of antiquity. Their houses were little more than sheds, erected in the neighbourhood of the trees under which they reclined and took their meals during the day. These habitations stood very thick in the groves which cover the low margin of the island. High mountains rose behind, and a number of small streams stole down the declivities to the sea-shore; the whole presenting, from a distance, a most enchanting picture.

It was conjectured by M. de Bougainville that the inhabitants of Otaheite were composed of two different races, and that one of these was in a servile condition: Cook also notices the superiority of the chiefs in figure and appearance, but does not venture to ascribe this difference to any circumstances of origin or descent. He does not seem to have observed the power which the chiefs usually exercised over their retainers, and which the French navigator, with perhaps too little reason, seems to have considered as absolutely despotic. But the king, it was evident, though treated with respect by all, possessed no power but what was derived from the

voluntary attachment of the chiefs, whose obedience or support in every enterprise could be secured only by consulting them. The rule of succession among these islanders is singular in the extreme. The son, as soon as he is born, succeeds to the authority of his father, who at once becomes only a regent instead of king, if he be fitted for that office. Associations of a licentious character existed among the chief persons in these islands; and, among other bad effects, tended to encourage the crime of infanticide; a crime to which the law of inheritance just mentioned may have held out some inducement, as the ambition of the parent was at once blighted by the birth of a son.

At the time of Cook's visit, the sovereignty had devolved on a boy only seven years old, the son of Hon ai and Oberea, the latter of whom had figured so conspicuously in captain Wallis's narrative as queen of the island. She lived separate from her husband, and though still treated as a noble, no longer enjoyed the same degree of power and consideration which had rendered her friendship so valuable to the commander of the Dolphin. As a further proof of the progress made by these islanders towards civilisation, it deserves to be remarked, that their women were not condemned to labour, as is usually the case amongst rude nations. They had, indeed, abundance of domestic occupation, in making and dyeing their cloth, preparing the meals, and similar offices; but though they were not permitted to eat with the men, they were in general treated with respect and attention.

When M. de Bougainville arrived here, he found the islanders already acquainted with the use of iron, which they called *aouri*, a name which he supposed them to have learned from the English, who had preceded him; but captain Wallis observed that they were not wholly ignorant of that metal in his time, though he does not mention by what name they called it; for as soon as they were presented with iron nails, they began to sharpen them, while they took no such pains with pieces of brass and copper. Cook circumnavigated and surveyed the

coasts of Otaheite, which he found to have a circumference of about thirty leagues; and after a stay of about three months he prepared to depart. In leaving the affectionate islanders, he remarks, "that, allowing for their theft, they need not fear a comparison with any people on earth." A native named Tupia, one of Oberea's ministers, and well instructed in all the learning of his countrymen, offered to accompany the English, and the proposal was readily accepted. The Otaheitans, it appeared, sometimes ventured two or three hundred miles through the ocean in their open canoes; and Tupia had a vague knowledge of above eighty islands, the position of many of which he attempted to describe. He was well acquainted with the heavens; and, in every part of the subsequent voyage in the Endeavour, he was enabled to point out the direction of his native island.

On leaving Otaheite, lieutenant Cook visited the neighbouring islands of Ulietea, Borabora, Otahah, Huaheine, and Raiataia. Tupia related, that in the time of his grandfather a friendly ship had called at the last named island, and he also stated that a ship had been wrecked on a low island called Oanna. These ships were, probably, those of admiral Roggewein's squadron, and Oanna may have been the *Schadelyk*, or *Pernicious* Island of that navigator. At Huaheine, Cook contracted a friendship with Oree, the old chief of the island, from whom he experienced unremitting kindness, and to whom, at his departure, he gave, along with some valuable presents, a small bag containing coins and medals, and a pewter plate with an inscription, as a memorial of his visit to this part of the world. These gifts the old chief promised to keep in safety. The people of Borabora had invaded some of the islands in the neighbourhood, and with such success that they were looked upon as invincible, and were become objects of dread to the simple islanders. Tupia was anxious that the English should terrify those haughty conquerors, and exhibit their superiority by firing great guns at Borabora; and at length, to calm his importunity, a ball was fired towards the island when the ship

was at least seven leagues distant from shore. To the group of islands, which lieutenant Cook now quitted, he gave the collective name of the *Society Islands*.

After sailing four days to the west and south-west, an island was discovered to which Tupia gave the name of *Oheteroa*. The natives crowded on the shore to resist the landing of the strangers: they were a handsome vigorous people, and seemed far to excel the natives of the Society Islands in the beauty of their dress. The cloth was dyed in various patterns, and of several colours, though bright yellow seemed to predominate. Their robes being collected round their waist by a belt of red cloth, gave them a gay and warlike appearance. Some had caps made of the feathers of the tropic bird, while others wore small turbans of a very elegant appearance. Their canoes were well constructed; and, as well as the javelins, were carved in a manner highly creditable to their taste and ingenuity. But no anchorage could be found near the island; and as the natives seemed bent on hostility, our navigators gave up all thoughts of cultivating an acquaintance with them, and pursued their voyage.

On the 15th of August they sailed from Oheteroa, and in the beginning of October perceived, in the colour of the sea, in the weeds with which it was covered, and the birds which flew around them, unequivocal signs of the proximity of land. At length, on the 6th of that month, land was distinctly seen stretching to a great extent in the horizon; several ranges of hills were distinguished rising one above another, and a chain of mountains of an enormous height terminated the picture in the rear. The general opinion was, that they had discovered the *Terra Australis Incognita*, but it was soon perceived that this must be a part of New Zealand or Staaten Land, discovered by Abel Tasman in 1642.

A party who went on shore in order to open an intercourse with the natives met with no success. They were fierce, and obstinately hostile; but it was discovered, to the surprise and pleasure of our navigators,

that when Tupia spoke to them in his native language, he was perfectly understood. In a quarrel which ensued, one of them was killed, and his dress appeared, on examination, to correspond exactly with the drawing appended to Tasman's voyage. As it was found impossible to commence an amicable correspondence with them by gentle means, it was determined to resort to force, and, according to the method followed by the first Spanish navigators, to capture the Indians first, in order to have an opportunity of treating them with kindness. This plan of proceeding can hardly be justified upon principles of reason or morality, and it has never been attended with such unequivocal success as to palliate its demerits. Two canoes were seen entering the bay, and the ship's boats proceeded immediately to intercept them: in one, the natives escaped by paddling; but those in the other, which was a sailing canoe, finding it impossible to get off, boldly prepared for battle. Of seven Indians who were in the canoe, four were killed on the first discharge of musketry, and the other three, who were all young, immediately jumped overboard, and attempted to save themselves by swimming: they were, however, overtaken and picked up by the boat, though not without some difficulty. They expected to be put to death at once; but as the studious kindness with which they were treated soon convinced them of their error, their consternation gave way to transports of joy. They conversed freely with Tupia; and after having been kept a day on board the ship, were again sent ashore.

The account which the boys gave to their countrymen of their treatment on board the ship led to a correspondence, which did not, however, bear the appearance of confirmed friendship. The New Zealanders still maintained a fierce and independent carriage, and acted so little in concert, that the behaviour of different individuals was often of a totally opposite character: but their distrust could not be generally overcome, nor an intercourse established which was likely to prove safe

and advantageous. An attempt was made by them to carry off Tayeto, Tupia's boy, and they nearly succeeded; but guns being fired at the canoe as it paddled off, the natives, in a moment of fear, let go their hold, and the boy leaped into the water. The New Zealanders made great exertions to secure their prize, but the ships' boats finally succeeded in picking up the youth, whose terror at the violent conduct of these savages was increased by the conviction which our navigators had obtained, that they were cannibals, and even that they regarded human flesh as a dainty.

This bay, in which no provisions could be procured, was named *Poverty Bay;* and our voyagers, on leaving it, proceeded along the coast towards the north. They gave the name of *Mercury Bay* to the inlet in which they anchored while observing a transit of that planet over the sun. They were surprised to find that the natives, notwithstanding their ferocity, were not unacquainted with the art of cultivating the ground. They had gardens, in which they reared gourds and several kinds of fruits. A decked canoe also was found on this shore, which indicated their proficiency in maritime affairs. Their *heppahs* or hamlets were forts neatly constructed on elevated situations, defended by lines and trenches, and accessible only by a steep and narrow entrance. They had no knowledge of iron when our voyagers first touched here, although iron sand was found in the beds of several streams. The women were thickly painted with oil and red ochre, and the men were tattooed after the usual fashion of the South Seas. They were strong and active, not deficient in intelligence, or in sentiments of generosity, notwithstanding the cruelty of disposition engendered by their habits of continual warfare. Tupia conversed much with their priests; and from the superiority of his knowledge and the variety of his superstitious lore, he was regarded by them with peculiar respect and veneration.

In prosecuting his examination of the coast towards the north, Cook entered a deep inlet terminating in a

large river, which he explored to the distance of fourteen miles: from the magnitude of this river, and the general appearance of the country round it, he named it the *Thames*. The timber which grew here was of enormous size, trees being seen nearly twenty feet in girth six feet from the ground, and above eighty feet in height to the branches.

Having finished the examination of the north-western shore of New Zealand, Cook experienced such severe gales, though it was now midsummer in these latitudes, that in five weeks he did not advance above fifty leagues in his course along the western shore. He at length reached a secure and capacious harbour, which he named *Queen Charlotte's Sound*. The country was here taken possession of, and the sound carefully surveyed. Wood, water, and fish, were in the greatest abundance, the natives friendly, and plants of an antiscorbutic quality were gathered on the shore, which soon restored the crew to perfect health. Here our voyagers were particularly struck with the exquisite warbling of the birds, which, like our nightingales, sing only during the night.

On ascending a height in the neighbourhood of the sound, Cook was surprised on descrying the sea to the south-east, and thus found that the land, the continuity of which he had not before suspected, was divided by a strait. Passing through this strait, to which geographers have unanimously given the name of its discoverer, he directed his course towards the north till he arrived near the point where his examination of this country had commenced. He then resumed his course to the south-east, and followed the coast of the southernmost of the two islands comprised under the name of New Zealand, returning again from the south to Queen Charlotte's Sound. The southern island, or, as the natives call it, *Tuvai Poenammoo*, is a rugged country, with mountains of prodigious height, and covered with snow the greater part of the year. The inhabitants also, though not more fierce, are ruder than their northern neighbours. They differ likewise in dialect from the inhabitants of *Eahei-*

nomauwe, as the northern island is called, where, as the climate is more genial and the soil more luxuriant, the population is considerably greater, and the arts as well as the institutions of rude society much more advanced.

Of the natives of New Zealand, Cook entertained a highly favourable opinion, notwithstanding their cannibalism, of which he saw numerous incontestible proofs. He could not collect from them any tradition respecting the arrival of Tasman on their shores; but they heard of a country called *Ulimarou*, situated N. W. by W., where the people eat hogs, and whence some canoes seemed to have accidentally arrived in their country. The circumnavigation of New Zealand was the first grand discovery of Cook. When Tasman touched on that country, he imagined it to be a part of the great Terra Australis, or continent supposed to extend to the south pole. Our navigator was satisfied with having disproved this supposition; and as the lateness of the season would not permit him to continue his researches in higher latitudes, he determined to direct his course to the eastern coast of New Holland, respecting which the learned world was still in total ignorance.

He took leave of New Zealand on the 31st of March, 1770, and in twenty days discovered the coast of New Holland at no great distance from the point where the survey of Tasman had terminated. In proceeding to the north, an inlet was entered, in which the ship rode securely for some days. Inhabitants were seen, but, from their shyness and timidity, they could not be induced to approach the strangers: they seemed to be sunk in that brutal condition which is insensible even to the promptings of curiosity. From the variety of new plants collected here by the naturalists of the expedition, this inlet received the name of *Botany Bay*. No rivers were discovered by Cook in his voyage along this coast, which has since been found abundantly supplied with fine streams. The natives, wherever they were seen, manifested the same repugnance to the strangers, and the same indifference to the trinkets presented to them.

Towards the north, the country grew more hilly, and the navigation of the coast became more dangerous and intricate.

No accident had yet occurred in a voyage of 2000 miles along a coast hitherto unexplored; but in lat. 16° S. a high headland being in sight, which from the circumstance was afterwards named *Cape Tribulation*, the ship during the night struck on some coral rocks with so much force that there seemed imminent danger of her going to pieces. The planks which formed her sheathing were seen floating off, and the water rushed in with such impetuosity, that, though all the pumps were manned, the leak could hardly be kept under. As day broke, land was descried eight leagues distant, without an island between, to which the boats might convey the crew in case of the ship's foundering. The guns and all the stores that could be spared were thrown overboard, and preparations were made to heave the ship off the rocks, although it was thought probable that she would sink soon after. On the following night, however, she was got afloat, and, to the surprise of all, it was found that the leakage did not increase. By constant exertion and cool perseverance, the ship was navigated to a small harbour opportunely discovered on the coast, and the only harbour, indeed, seen by our people during the whole voyage, which could have afforded them the same relief. On examining the injury done to the vessel, it was found that a large piece of the coral rock, having forced its way through the timbers, had remained fixed in the aperture; and but for this providential circumstance the ship must have sunk the moment she was got off the reef.

The cove in which our navigators found shelter is situated at the mouth of a small stream, to which was given the name of the *Endeavour River*. Here the natives appeared rather more familiar; but they set little value on any thing offered to them, except food. When some turtle, which they coveted, was refused them, they avenged the affront by setting fire to the long grass near the tents; an action which had nearly been attended

with disagreeable consequences. Mr. Banks and Dr. Solander found here abundance of employment; almost every thing connected with the animal and vegetable kingdoms being absolutely new. Our naturalists were particularly pleased with the animal called by the natives *kangaroo*; they saw several at a distance, but a long time elapsed before they could succeed in shooting one.

The ship being repaired, our voyagers left the harbour, and, after much patient labour and anxiety, at length gained the deep sea, having been three months entangled within the reefs. They now prosecuted their voyage to the north, flattering themselves that the danger was gone by, when the wind abated, and the ship was found to be drifting fast towards the reefs which lined this coast nearly in its whole extent, and on which the great waves of the Southern Ocean break with a tremendous surf. Her destruction seemed inevitable, when a narrow channel through the reefs was descried at no great distance; and although the attempt was attended with great risk, yet the ship was steered to run through it. Having thus entered from necessity a second time within the reef, Cook resolved to persevere through all difficulties in following the coast, lest he might lose the strait that separates New Holland from New Guinea; "if," as he doubtfully expresses it, "such a strait there be." He at length reached a point of land from which he could discern an open sea to the south-west, and was thus convinced that he had found the strait in question. He then landed, and in the name of his sovereign took possession of the immense line of coast that he had discovered, and to which he gave the name of *New South Wales*. The little island on which the ceremony was performed received the name of *Possession Island*.

The crew of the Endeavour had suffered so much from sickness and fatigue, that it was not deemed advisable to prolong the voyage by an examination of the coasts of New Guinea. Our navigator, therefore, held his course for Batavia, where he wished to refit his vessel: but the noxious climate of this place proved more

fatal to the men than all their preceding hardships; scarcely ten remained in a condition to do duty. Tupia and his poor boy Tayeto, who had been afflicted with the scurvy during the whole voyage, were among the first victims to the pestilential air of Batavia. The seeds of illness lingered in the ship long after she had left the place; and before her arrival at the Cape she had lost no less than thirty persons, among whom were Mr. Green the astronomer, Dr. Solander, and the surgeon; the life of Mr. Banks also was for some time despaired of. On the 10th of June, land, which proved to be the Lizard, was discovered by the same boy who had first seen New Zealand; and on the 12th, Cook came to an anchor in the Downs, having been employed two years and eleven months in his voyage round the earth.

CHAP. IV.

COOK'S SECOND VOYAGE.

QUESTION OF A SOUTHERN CONTINENT STILL UNSETTLED. — SECOND EXPEDITION UNDER THE COMMAND OF COOK. — CAPE CIRCUMCISION. — ICE FOUND TOWARDS THE SOUTH. — AURORA AUSTRALIS. — ARRIVAL AT NEW ZEALAND. — COURSE OF THE ADVENTURE. — VAN DIEMEN'S LAND. — USEFUL ANIMALS LEFT IN NEW ZEALAND. — VOYAGE ACROSS THE SOUTHERN PACIFIC. — DRAMATIC PERFORMANCES IN OTAHEITE. — OMAI AND OEDIDEE EMBARK IN THE SHIPS. — AMSTERDAM AND MIDDLEBURG ISLANDS. — THEIR CULTIVATION. — PROOFS OF CANNIBALISM AT NEW ZEALAND. — VOYAGE ACROSS THE ANTARCTIC SEAS. — LAND OF JUAN FERNANDEZ. — EASTER ISLAND. — DESCRIPTION OF THE IMAGES. — THE MARQUESAS. — BEAUTY OF THE PROFILE. — OTAHEITE. — TRADE IN RED FEATHERS. — GREAT NAVAL REVIEW. — FRIENDLY ISLANDS REVISITED. — EXTENT OF THE GROUP. — THE NEW HEBRIDES EXAMINED. — NEW CALEDONIA DISCOVERED. — NORFOLK ISLAND. — VOYAGE FROM NEW ZEALAND TO CAPE HORN. — THE SOUTHERN THULE OR SANDWICH LAND. — ARRIVAL OF COOK IN ENGLAND. — LAMENTABLE OCCURRENCE IN QUEEN CHARLOTTE'S SOUND.

THE first important discovery made by Cook was effected by the circumnavigation of New Zealand.

When Tasman described that country, he supposed it to be a part of the great Terra Australis Incognita, extending probably across the southern Pacific Ocean; but Cook's voyage at once overturned this theory. An opinion, however, which has long existed, cannot be at once dispelled, although utterly groundless, and many still continued to believe in the existence of a southern continent, although Cook's discoveries had cut off the connection between their theory and the facts which hitherto had been adduced in its support: but to set the question of a southern continent completely at rest, another expedition was necessary, and the English government, having now made the advancement of science the object of national exertions, resolved to continue their laudable researches. The king was partial to the scheme; and the earl of Sandwich, who was at the head of the admiralty, possessed a mind sufficiently liberal and comprehensive to second effectively the wishes of his sovereign.

Captain Cook was named at once as the fittest person to command the new expedition. Two ships, the Resolution and the Adventure, the former of 462 the latter of 336 tons burden, were fitted out for the voyage; and, that no opportunities might be lost to science from the want of persons capable of observing nature under every aspect, astronomers and naturalists of eminent ability were engaged to accompany the expedition; Messrs. Wales and Bayley proceeding in the former, Reinhold Forster and his son in the latter capacity. The ships were amply stored and provided for a long and difficult voyage, particularly with antiscorbutics, and whatever was thought likely to preserve the health of the crews.

Cook sailed from Plymouth on the 13th of July, 1772, on his second voyage of discovery. On his arrival at the Cape of Good Hope, he was induced, by the entreaties of Mr. Forster, to allow the celebrated naturalist Sparmann to join the expedition. He now directed his course to the south, in search of the land said to have been discovered by the French navigator Bouvet,

but violent gales drove him far to the east of the meridian in which it was supposed to lie. After long struggling with adverse winds, he at length reached the same meridian, some leagues to the south of the latitude assigned to Cape Circumcision. Having thus proved that the land said to have been seen by Bouvet, if it existed at all, was certainly no part of a southern continent, he continued his course to the south and east.

On the 10th of December our navigators first met with islands of ice, and on the following days these occurred in greater numbers and of larger size: some of them were nearly two miles in circuit, and sixty feet high; yet such was the force of the waves, that the sea broke quite over them. This was at first view a gratifying spectacle, but the sentiment of pleasure was soon swallowed up in the horror which seized on the mind from the contemplation of danger; for a ship approaching these islands on the weather side would be dashed to pieces in a moment. Amidst the obstructions to which our navigators were exposed from the ice islands continually succeeding one another, they derived the advantage of having an abundant supply of fresh water; large masses of ice were carried off, and stowed on deck, and the water produced from its melting was found perfectly sweet and well tasted.

On the 17th of January, 1773, our navigators had reached the latitude of 67° 15′ S., and they saw the ice extending from east to west-south-west, without the least appearance of an opening. It was vain, therefore, to persist any longer in a southerly course; and as there was some danger of being surrounded by the ice, prudence dictated a retreat to the north. On the 8th of February, the weather being extremely thick and hazy, it was found that the Adventure had parted company: the rendezvous appointed in case of this accident was Queen Charlotte's Sound, in New Zealand; and thither Cook directed his course. In the latitude of 62° S., on the 17th of the same month, between midnight and

three o'clock in the morning, lights were seen in the heavens, similar to those that are known in the northern hemisphere by the name of the Aurora Borealis. Captain Cook had never heard that the Aurora Australis had been seen before, but the same phenomenon was witnessed repeatedly in the sequel of this voyage. During his run to the eastward in this high latitude, he had ample reason to conclude that no land lay to the south, unless at a very great distance. At length, after having been 117 days at sea, during which time he had sailed 3660 leagues without having come once within sight of land, he saw the shores of New Zealand on the 25th of March, and on the following day came to an anchor in Dusky Bay. Notwithstanding the length and hardships of his voyage, there was no sickness in the ship; the attention which he paid to the health of the men, by enforcing cleanliness, by keeping the vessel dry and well ventilated, and by the judicious use of antiscorbutic diet, being attended with complete success. Having surveyed Dusky Bay, he proceeded to Queen Charlotte's Sound, where captain Furneaux had arrived before him.

The Adventure, after parting company with the Resolution, had followed a more northerly course, and traced the coasts of Van Diemen's Land along the southern and eastern shores. Captain Furneaux reported, "that in his opinion there are no straits between this land and New Holland, but a very deep bay." Cook had intended to investigate this point, but, considering it to be now settled by the judgment of his colleague, he resolved to prosecute his researches to the east, between the latitudes of 41° and 46°. But before he left Queen Charlotte's Sound he succeeded in establishing a friendly and mutually advantageous intercourse with the natives. He endeavoured to give them substantial proofs of his kind intentions, by making an addition to their stock of useful animals. He put on shore a ewe and ram, and also two goats, a male and female. A garden also was dug, and a variety of seeds

of culinary vegetables, adapted to the climate, were sown in it.

Although it was the winter season, Cook determined not to lose his time in utter inactivity. His ships being sound, and his crews healthy, he thought that he might safely proceed to examine the Southern Ocean within the latitude of 46°; and then, refreshing at some of the islands between the tropics, return in the summer season to carry his researches to a higher latitude. His voyage from New Zealand towards the east was not productive of any interesting discoveries, nor diversified by any but the ordinary details of navigation. He felt convinced, from the great sea that rolled from the south, that no land of any extent could lie near him in that direction. When he had advanced so far as to find himself to the north of Carteret's track, he could no longer entertain any hope of finding a continent; and this circumstance, with the sickly state of the Adventure's crew, induced him to direct his course to the Society Islands. During this part of his voyage, he saw a number of those small low islands which compose the Dangerous Archipelago of Bougainville.

The ships narrowly escaped destruction by drifting on the coral reefs at Otaheite: they were saved only by the promptness of their commander and the unremitting exertions of the crew. On the 24th of August they anchored in their old station in Matavai Bay. The men on board the Resolution were at this time in perfect health; but the crew of the Adventure, on the other hand, suffered dreadfully from the scurvy, though the two ships were equipped alike, and the same precautionary system to preserve the health of the men was prescribed to both; but zeal on the part of the officers was requisite to give efficacy to the orders, and their example was necessary to encourage the men to sacrifice old habits in order to preserve their constitutions.

During this visit to Otaheite, our navigators obtained a more intimate acquaintance with the manners and cha-

racter of the natives. Of their religious doctrines they were unable to acquire a distinct knowledge; but they ascertained that human victims were often sacrificed to their gods. They also witnessed the *Heavas* or dramatic representations of the people, and found them not devoid of archness and ingenuity. The performance was generally extemporaneous, founded upon some incidents presented at the moment, and in which our navigators usually made a prominent figure. Otoo, the present king of Otaheite, a man of fine figure but of remarkably timid disposition, contracted an intimate friendship with captain Cook. Oberea, who, when the island was first visited by captain Wallis, was so conspicuous a character, was now reduced to an humble station, and had declined as much in personal appearance as in rank. It is remarkable that few enquiries were made after Tupia, who had accompanied Cook in his former voyage, or after Aootooroo, the native of Otaheite who had accompanied Bougainville to Europe; but, though the islanders were neglectful of their own countrymen, they were uniformly solicitous in enquiring after Mr. Banks.

On leaving Otaheite, Cook visited the other islands of the group, where he found provisions in greater abundance. Oree, the chief of Huaheine, evinced towards him the most affectionate regard. Omai, a native of Ulietea, being desirous to accompany the English, was admitted by captain Furneaux on board the Adventure: he was not of the higher class, and, consequently, not a favourable specimen of these islanders as far as regarded person and deportment; but his docility and general propriety of conduct eventually justified the choice of captain Furneaux. A young native of Borabora, named Hete-Hete or Oedidee (as our great navigator named him), was at the same time allowed by captain Cook to embark in the Resolution.

On quitting the Society Islands, Cook directed his course to the west, where he had reason to believe, from the accounts of the natives, that much yet remained to

be explored. At the island named Middleburg by Roggewein, he was well treated by a chief called Tioony: at Amsterdam Island his reception was equally favourable. The language of these islanders differed but little fron that of Otaheite, and they were evidently of the same race. Some of our navigators thought them much handsomer; but others, and among these Cook himself, were of a different opinion. The men were grave and stately; but the women, on the contrary, were remarkably vivacious, and prattled unceasingly to the strangers, regardless of the mortifying fact that the latter could not understand them. But these people were chiefly distinguished from the natives of the Society Islands by their superior industry. On the Island of Amsterdam captain Cook was struck with admiration; when he surveyed the cultivation and the beauty of the scene, he thought himself transported into the most fertile plains of Europe: there was not an inch of waste ground. The roads or paths occupied no more space than was absolutely necessary, and the fences did not take up above four inches each; nor was this small portion of ground wholly lost, for the fences themselves contained in general useful trees or plants. The scene was every where the same; and nature, assisted by a little art, no where assumed a more splendid appearance than in these islands.

Cook now directed his course again to New Zealand; but, on approaching that country, the ships had to encounter a succession of severe gales and continued bad weather, during which the Adventure was again lost sight of, and never afterwards rejoined. On the 3d of November the Resolution anchored in Queen Charlotte's Sound. The winter had been spent not unprofitably in revictualling the ships, restoring the health of the crews, and obtaining a more accurate knowledge of the islands between the tropics. And now, as summer approached, it was Cook's intention to run from New Zealand, where wood and water were to be procured in abundance, and to explore the high southern latitudes from west to east;

in which course he might reckon upon having the winds and currents in his favour. While the Resolution lay in Queen Charlotte's Sound, indubitable proofs presented themselves that cannibalism was common among the natives: one of them who carried some human flesh in his canoe, was allowed to broil and eat it on board the Resolution, in order to satisfy the doubts of some of the officers. Oedidee, who witnessed all this, was shocked beyond measure at the spectacle: at first he stood motionless as a statue, but his horror at length gave way to rage, which vented itself not only on the New Zealander, but on the officers who had encouraged him; and he could not be induced even to touch the knife which had been employed to cut the human flesh.

On the 26th of November, Cook sailed to prosecute his examination of the antarctic seas. His crew were in good health and high spirits, not at all dejected by the arduous task which was before them. In a few days they crossed the antipodes of London, and were thus on the point of the globe which was most distant from their home. The first ice island was seen on the 12th of December; and, on the 30th of that month, our navigators had reached the 71st degree of southern latitude: but here the ice was so compact that it was impossible to proceed any farther towards the south; and it was also obvious that no continent existed in that direction, but what must be inaccessible from the ice. It was Cook's intention to winter again within the tropic; but, in proceeding thither, he wished to satisfy himself as to the southern land said to have been discovered by Juan Fernandez. He sailed sufficiently near the position assigned to that supposed continent to assure himself that it could not have been any thing more than an island of moderate size. He now directed his course in search of Davis's Land or Easter Island, which had been sought in vain by Byron, Carteret, and Bougainville: Cook, however, succeeded better, and made the island on the 11th of March, 1774. The natives were found to speak a language radically the same with that of Otaheite, and

which thus reaches across the Pacific Ocean from New Zealand to the sequestered islands in the East. Easter Island was found to be remarkably barren, ill supplied with water, and wholly without wood. But the attention of the English was forcibly attracted by the great statues seen on the island by Roggewein. About fifteen yards from the landing place was found a perpendicular wall of square hewn stones, about eight feet in height, and nearly sixty in length; another wall parallel to the first, and about forty feet distant from it, was raised to the same height; the whole area between the walls was filled up and paved with square stones of blackish lava. The stones of the walls were so carefully fitted as to make a durable piece of architecture. In the midst of the area was a pillar consisting of a single stone, about twenty feet high and about five feet wide, representing the human figure down to the waist. The workmanship was rude but not bad; nor were the features of the face ill formed, but the ears were long beyond proportion. On the top of the head was placed upright a huge round cylinder of stone, above five feet in height and in diameter; this cap, which resembled the head-dress of an Egyptian divinity, was formed of a kind of stone different from that which composed the rest of the pillar, and had a hole on each side, as if it had been made round by turning. It appeared as difficult to explain how the natives of this island, who were but few in number, could carve such huge statues with no better tools than those made of bones or shells, or how they raised them on their pedestals when finished, as to divine for what purpose they undertook such gigantic labours; for it did not appear that the statues were objects of worship; yet on the eastern side of the island they were numerous enough to employ the male population of the island for many centuries in their construction. The skill of this people in carving was still more manifest in the ornaments of their canoes, and in small wooden figures, of which the English brought home many curious specimens.

From Easter Island Cook directed his course to the Marquesas, discovered by Mendana in 1595; and on the 6th of April he got sight of one island of the group which was, however, a new discovery, and received, from the gentleman who first descried it, the name of *Hood's Island*. The other islands seen by Mendana, St. Pedro, Dominica, and St. Christiana, were afterwards discovered in succession. The ship with much difficulty anchored in Mendana's Port in the last mentioned island. Magdalena, the fifth island of the group, was seen only at a distance. Of the inhabitants of these islands captain Cook tells us, that collectively they are without exception the finest race of people in this sea; for fine shape and regular features they perhaps surpass all other nations. Nevertheless the affinity of their language to that spoken in Otaheite and the Society Islands shows that they are originally of the same nation. Oedidee could converse with them tolerably well, though the English could not, and it was obvious that their languages were nearly the same. In their manners and arts the people resembled the natives of Otaheite, but appeared to be rather less ingenious and refined. Forts, or strong holds, were seen on the summits of the highest hills; but they were not visited by the English, who had not become sufficiently acquainted with the natives to venture into the interior.

Cook, having rediscovered the Marquesas of Mendana, proceeded to Otaheite, and passing by a group, to which he gave the name of Palliser's Islands, and some others which had been seen by Byron, he anchored in Matavai Bay on the 22d of April. At this time there were no sick on board; but as the island seemed to abound with provisions, our navigator was willing to prolong his stay here. His original stock in trade was, indeed, now exhausted; but he found that the people of Otaheite set a great value on the red parrot feathers, of which he had brought a considerable supply from Amsterdam and Middleburg Islands. He thus accidentally learned an advantageous and easy course of traffic in the South Sea.

Among other entertainments with which our naviga-

tors were treated during this visit to Otaheite was a grand naval review. The vessels of war consisted of 160 great canoes, from fifty to ninety feet in length; they were decorated with flags and streamers; and the chiefs, together with all those who were on the fighting stages, were dressed in their war habits. The whole fleet made a noble appearance, such as our voyagers had never before seen, and could not have expected in this part of the world. Besides the vessels of war, there were 170 sail of smaller double canoes, which seemed to be designed for transports and victuallers. Upon each of them was a small house or shed; and they were rigged with a mast and sail, which was not the case with the war canoes. Captain Cook estimated, at a moderate computation, that there could not be less than 7,760 men in the fleet; but the immense number of natives assembled as spectators astonished the English more than the splendour of the armament, and they were still farther surprised to learn that this fleet was the naval force of only one of the twenty districts into which the island is divided. On these equivocal grounds they were led to form an extremely exaggerated calculation of the population of Otaheite, which they estimated to be at least 200,000 souls; a number exceeding the truth, perhaps, in the proportion of ten to one.

From Otaheite our navigators proceeded to visit the Society Islands, at Huaheine. Cook was affectionately received by the old chief Oree, who still carefully preserved the medals, coins, and pewter plate with an inscription commemorating the voyage, which our commander had given him on his former visit. Oedidee, who for seven months had been the faithful companion of our voyagers, and had made with them the tour of the Pacific, was put on shore at Ulietea. He left the English with regret demonstrative of a strong attachment to them; and nothing could have torn him from them but the fear of never returning to his native country. He was a fine young man, of a docile and humane disposition, and of the better class of natives, being nearly

related to Opoony, the formidable chief of Borabora. But from his inexperience and imperfect acquaintance with the traditionary knowledge of his countrymen, but little could be learned from him respecting their history.

Cook again directed his course to the west, and repeated his visit to the Friendly Islands. This name he gave to a group extending through about 3 degrees of latitude and 2 degrees of longitude, and comprising Anamooka, which Tasman, who first discovered it, named Rotterdam, Tonga-taboo or Amsterdam, Eaoowee or Middleburg, and Pylstart Islands. But this appellation, to which these islands were entitled by the firm alliance and friendship which seemed to exist among their inhabitants, and their courteous behaviour to strangers, might perhaps be extended much farther, so as to include the Boscawen and Keppel Isles discovered by Captain Wallis, and inhabited by people of the same friendly manners.

Pursuing their course to the west, our navigators discovered, on the 16th of July, land, which was justly conjectured to be the *Terra Australis del Espirito Santo* of Quiros. After exploring the coast for a few days, Cook came to an anchor in a harbour in the island of Mallicolo. The inhabitants of this island were the most ugly and deformed race which our navigators had yet seen, and differed in every respect from the other inhabitants of the Southern Ocean: they were dark coloured, of small stature, with long heads, flat faces, and countenances resembling that of a monkey. Their language, also, was found not to have any discoverable affinity with that prevailing through the islands with which the English had any acquaintance. This people differed, likewise, from the great Polynesian race not more by their language and figure than by their scrupulous honesty. As our navigators proceeded towards the south from Mallicolo, they passed by a group which Cook named *Shepherd's Isles*. Farther to the south was discovered a large island agreeably diversified with woods and lawns over the whole surface, and exhibiting a most beautiful and delightful prospect. This our navigator

named *Sandwich Island* in compliment to his friend and patron the earl of Sandwich. Still farther to the south was seen another large island, called by the natives Erromango, which he coasted for three days, and then came to an anchor in the intention of procuring a supply of wood and water. This, however, could not be effected without a violent conflict with the natives, who were both fierce and treacherous. It was observed that they differed from the inhabitants of Mallicolo both in language and physical conformation; they were well shaped and had tolerable features, but dark coloured, and with hair crisp and somewhat woolly. From this place Cook sailed for an island which had been descried some time before at a distance. He found that it was called Tanna by the inhabitants, from whom also he learned the names of three other islands in its neighbourhood, Immer, Erronan, and Anaton. Two languages were found to be spoken in Tanna; one of them, which was said to have been introduced from Erronan, was nearly the same with that of the Friendly Islands. The other, which our navigators considered peculiar to Tanna, Erromango, and Anaton, was different from any they had hitherto met with in the course of their researches. The people at Tanna were well proportioned, but not robust. They had good features and agreeable countenances. Though active, and fond of martial exercises, they seemed incapable of patient labour. It appeared that they practised circumcision, and that they were eaters of human flesh; though, as their island abounded with hogs and fowls, and a variety of fruits, they could not be driven by necessity to adopt this horrid practice.

Captain Cook devoted above a month to the survey of this archipelago, with which previous navigators had made but a superficial acquaintance. The northern islands were discovered, in 1606, by Quiros, who supposed them to be portions of the great southern continent. Bougainville, in 1768, dispelled this idea, though he did not proceed to examine the islands near

which he sailed; but captain Cook, besides ascertaining the extent and situation of the islands already known, explored the whole group; and, conceiving that in consequence he had a right to name them, bestowed on them the appellation of the *New Hebrides*.

The season was now approaching, when it would be necessary to resume his researches in a high southern latitude, and he hastened therefore to New Zealand, where he intended to refresh his people and prepare for a navigation of considerable length. He sailed from the New Hebrides on the 1st of September, and on the 4th discovered land, near which the Resolution came to anchor the next day. The inhabitants were a strong, active, and handsome race, bearing some resemblance to the people of Tanna, and those of the Friendly Isles. The same mixed character was observed in their language: they had never seen Europeans before, but were friendly and obliging in their behaviour; and, what is still more remarkable in the South Seas, strictly honest in all their dealings. To this island captain Cook gave the name of *New Caledonia:* and though compelled by necessity to leave it before it was fully surveyed, he had nevertheless examined it sufficiently to prove, that, excepting New Zealand, it is perhaps the largest island in the South Pacific Ocean. As the Resolution pursued her course from New Caledonia, land was discovered, which, on a nearer approach, was found to be an island of good height, and about five leagues in circuit. It was uninhabited, and probably our English navigators were the first persons who had ever set foot on it. In its vegetable productions it bore a close resemblance to New Zealand: the flax plant of that country was here particularly luxuriant; but the chief produce of the island was a majestic species of pine, of such a size that, breast high, two men could scarcely clasp the trunk. This little spot was named *Norfolk Island*. Its fine woods and fertile soil allured, some years later, a party of British settlers; who finally abandoned it, however, from the inaccessible nature of its coast.

On the 18th of October the Resolution came to anchor in Queen Charlotte's Sound. This was the third time of touching at New Zealand during this voyage. On searching for the bottle which Cook had left behind on his last visit, containing the particulars of his arrival, it was found to have been taken away; and from other circumstances it was evident that the Adventure had visited the harbour after the Resolution had left it. While the Resolution remained here, the intercourse maintained with the natives was of the most friendly description; captain Cook continued his efforts to stock the island with useful animals, and for that purpose ordered a boar and sow to be put on shore.

On the 10th of November he left New Zealand to pursue his voyage to the east. Towards the close of that month, he had reached the latitude of 55° 48′ S., when, deeming it useless to search any longer for a continent in that direction, he bore away for Cape Horn; and, on the 17th of December, had sight of Tierra del Fuego. This is the first instance of a run quite across the Southern Pacific. It now only remained for our navigator to cross also the Southern Atlantic to the point whence he had commenced his explorations. Having completed his examination of Tierra del Fuego and Staaten Land, he proceeded towards the east; and, after a voyage of ten days, land was seen at a distance, nearly covered with snow. On approaching the shore, it was found to be terminated in many places by perpendicular ice cliffs of considerable height. Pieces continually broke off with a noise like the report of cannon, and floated out to sea. The general aspect of the country was savage and horrid in the extreme. The wild rocks raised their lofty summits till they were lost in the clouds, and the valleys lay covered with everlasting snow. Our navigator, who at first view of this land supposed that it might be a continent, confesses that he was not much disappointed on discovering his error; "for to judge of the bulk by the sample it would not be worth discovering." In latitude 59°, and about 8° to the east of *New Georgia*, as this inhospitable shore was named, land was again

seen, presenting an elevated coast, whose lofty snow-clad summits reached above the clouds. To this bleak region Cook gave the name of the *Southern Thule*, as it was the most southern land which had yet been discovered; but on leaving the coast he gave to the whole country the general appellation of *Sandwich Land*, which he concluded to be either a group of islands or a point of the southern continent. But the great quantities of ice which he met with led him to infer the existence of a large tract of land near the south pole. He now sailed as far as the latitude assigned to Bouvet's supposed discovery; but no indications of land occurred, nor was it possible to believe any longer in the existence of Cape Circumcision.

Cook had now made a circuit of the Southern Ocean in a high latitude, and traversed it in such a manner as to demonstrate that no southern continent existed unless near the pole, and beyond the reach of navigation. During this circumnavigation of the globe, from the time of his leaving the Cape of Good Hope, to his return to it again, he had sailed no less than 20,000 leagues. On the 13th of July, 1775, he landed at Portsmouth, having been absent from Great Britain three years and eighteen days; during which time, and under all changes of climate, he had lost but four men, and only one of them by sickness.

It has been related above, that captain Cook, on approaching New Zealand for the second time in the course of this voyage, lost sight of the Adventure, and never joined company with that ship again. Captain Furneaux was long baffled by adverse winds in his attempt to reach Queen Charlotte's Sound, which was appointed the rendezvous for the ships in case of separation. At length, on the 30th of November, the Adventure got safe into the desired port. The Resolution not being there, captain Furneaux and his company began to entertain doubts of her safety; but, on going ashore, they observed on an old stump of a tree these words cut out—"Look underneath." They dug accordingly, and soon found a bottle corked and waxed down, with a letter in

it from captain Cook, signifying his arrival on the 3d, and departure on the 24th. Great exertions were now made to get the Adventure ready for sea; and on the 17th of December, the preparations being completed, Mr. Rowe, a midshipman, with nine men, were sent in the large cutter to gather a stock of wild greens for the ship's company. As the boat did not return the same evening nor the next morning, and the ship was now ready for sea, Mr. Burney, the second lieutenant, proceeded in search of her, in the launch, manned with the boat's crew and ten marines. The launch proceeded, firing guns into all the coves by way of signals, but no traces of the cutter were found till they reached Grass Cove: here a great many baskets were seen lying on the beach tied up; when cut open, some of them were found to be full of roasted flesh, and some of fern root, which served the natives for bread. On further search, some shoes were picked up, and a hand, which was immediately known to have belonged to Thomas Hill, one of the forecastle men, the initials of his name being marked on it with an Otaheitan tatooing instrument. The natives were collected in considerable numbers round Grass Cove, shouting and inviting the English to land, but evidently with no friendly intentions. From their numbers, and the suspicion which their conduct excited in our people, Lieutenant Burney did not deem it prudent to trust himself among them, but he pursued his examination far enough to obtain a melancholy certainty as to the fate of his unfortunate companions. "On the beach," he says, "were two bundles of celery, which had been gathered for loading the cutter; a broken oar was stuck upright in the ground, to which the natives had tied their canoes, a proof that the attack had been made here. I then searched all along at the back of the beach to see if the cutter was there. We found no boat, but instead of her such a shocking scene of carnage and barbarity as can never be mentioned nor thought of but with horror; for the heads, hearts, and lungs of several of our people were seen lying on the beach; and, at a little distance, the dogs gnawing their

entrails." The men who had thus fallen victims to the barbarity of the natives were among the healthiest and best of the ship's crew.

The Adventure was detained in the sound four days after this lamentable occurrence; during which time no natives were seen. On the 23d of December, however, she got to sea, and in little more than a month reached Cape Horn, being favoured by a strong current running to the east, and by westerly winds which blow continually in the summer season in the great ocean. Captain Furneaux continued his course eastward to the Cape of Good Hope, where he refitted his ship and refreshed his people. He then sailed for England, and anchored at Spithead on the 14th of July, 1774.

CHAP. V.

COOK'S THIRD VOYAGE.

VOYAGE OF SURVILLE. — HE DISCOVERS THE LAND OF THE ARSACIDES. — HE VISITS NEW ZEALAND. — DISCOVERIES OF LIEUTENANT SHORTLAND. — VOYAGE OF MARION DU FRESNE. — HE TOUCHES AT NEW ZEALAND. — HIS LAMENTABLE DEATH. — KERGUELEN DISCOVERS LAND IN THE SOUTHERN ATLANTIC. HIS RECEPTION AT COURT. — HE SAILS A SECOND TIME. — HIS DISGRACE. — HONOURS PAID TO COOK ON HIS RETURN. — HOPES OF A NORTH-WEST PASSAGE REVIVED. — EXPEDITION OF PHIPPS TO THE NORTH POLE. — COOK APPOINTED A THIRD TIME TO COMMAND AN EXPEDITION. — HIS INSTRUCTIONS. — REGRET OF OMAI ON LEAVING ENGLAND. — THE LAND OF DESOLATION. — VAN DIEMEN'S LAND. — ERROR OF CAPTAIN FURNEAUX. — LIVE STOCK LEFT IN QUEEN CHARLOTTE'S SOUND. — MANGEEA DISCOVERED. — WATEEO. — OMAI'S EXAGGERATIONS. — SHIPWRECKED ISLANDERS. — VISIT TO THE FRIENDLY ISLANDS. — GENEROSITY OF THE KING. — EXTENT OF HIS DOMINION. — ACCOUNTS OF THE NEIGHBOURING ISLANDS. — HORSES LANDED AT OTAHEITE. — WONDER OF THE NATIVES. — OMAI SETTLED AT HUAHEINE. — FURTHER ACCOUNTS OF HIM.

In 1769 some discoveries of importance were made in the South Seas by a French mercantile adventurer.

Two ships were fitted out in Bengal by MM. Law and Chevalier, for a trading voyage to Peru, and were placed under the command of M. de Surville. While he was preparing to embark, news arrived in India that the English had discovered in the South Sea, 700 leagues from Peru, and in lat. 27° S., an island exceedingly rich, and inhabited by Jews. This story gained credit, being congenial to the avaricious cravings of mankind; and even those who suspected fiction in the mention of Jews were still willing to believe that the newly discovered country was eminently rich. Surville, touching at the Bashee Islands, carried off three of the natives to supply the deficiencies of his crew; thus furnishing a conspicuous example of that overbearing violence which has almost universally forced weak and uncivilised nations to regard Europeans as their natural enemies. In running to the south-east from New Guinea he discovered land, to which he gave the name of the *Land of the Arsacides*, and which was, in fact, a part of that long chain of islands that had already been seen by Bougainville, who gave the name of *Louisiade* to the portion which he had examined. Surville, in his intercourse with the natives, found them to be of a fierce, intractable, and treacherous disposition, and chose to designate them *Arsacides*, a name which he supposed to be equivalent to the word assassins. Surville afterwards visited New Zealand, and anchored in a bay, to which he gave the name of *Lauriston*. Captain Cook, who named it *Double Bay*, was at the same time employed in surveying its shores, yet these two navigators did not meet nor descry each other. The French commander, having lost his boat while anchoring here, went on shore with an armed party to punish the natives, whom he supposed to have stolen it. In a short time he burned several villages, and carried off a native chief. This outrage, perpetrated by some of the first Europeans who visited them, was soon afterwards repaid with cruel reprisals by the New Zealanders. The chief died at Juan Fernan-

dez, and Surville was drowned while going on shore at Valparaiso.

The *Land of the Arsacides*, which Surville had coasted on the north-eastern side, was again discovered in 1789, by lieutenant Shortland of the British navy, on his voyage from Port Jackson to the East Indies: he followed its southern shores, to which he gave the name of *New Georgia*, and passed through the straits of Bougainville, which he named from himself, being apparently ignorant of the discoveries of the French navigators. The chain of large islands thus seen successively and partially by Bougainville, Surville, and Shortland, and which stretch from north-west to south-east, between New Guinea and the New Hebrides, are unquestionably the *Salomon Islands* of the early Spanish navigators. The Egmont Island of Carteret, who sought the Salomon Islands, and who approached them very closely without being aware of it, may be considered as belonging to the archipelago.

It has been already mentioned that Bougainville brought home with him to France a native of Otaheite named Aootooroo. When the fame of Cook's discoveries began to excite a general interest in Europe, captain Marion du Fresne, animated with a desire to emulate the glory of the English navigator, offered to take back the Otaheitean to his native land from the Isle of France at his own expense: the offer was accepted; and Kerguelen, a navigator of some note, was commissioned to carry Aootooroo to the Isle of France, and then to proceed to examine more carefully the southern part of the Atlantic Ocean. The Otaheitan died at Madagascar; but Marion did not on that account relinquish his plans, but proceeded, in the ardent hope of making some important discoveries. He arrived at New Zealand without any accident, and anchored in the Bay of Islands where his people lived on terms of familiarity, and apparently of cordial friendship with the natives; but some offence was given unawares to the passionate and capricious savages: Marion was murdered, with sixteen officers and men who had accompanied him on shore.

Another party of eleven men, who were employed cutting wood in a different quarter, were at the same time set upon suddenly, and only one escaped to the ships to relate the dismal fate of his companions. When the French landed to seek the remains of their unfortunate commander, the natives insultingly cried to them from their fastnesses, "Tacowry (the chief of the district) has killed and eaten Marion." After this melancholy accident the ships returned to the Isle of France under the command of M. Duclesmeur, all plans of discovery being abandoned.

Kerguelen in the mean time sailed from the Isle of France in January, 1772; and, on the 12th of February, discovered, in lat. 50° 5′ S., high land, near the coast of which he remained six days; during this time he was separated from the corvette which accompanied him. To the bleak and sterile shores which he had discovered he gave his own name; took formal possession of them for his sovereign; and, on his return to France, described their appearance in such glowing terms, that Louis XV., deceived by his representations, hung to his button-hole, with his own hand, the cross of St. Louis. Kerguelen's enemies, however, insisted that he had seen ice at a distance, and mistaken it for land; they called on him to show some of the productions of the country as a proof of his discovery, and insinuated that he had purposely got rid of his comrade that he might be at liberty to indulge in gross fictions. The king, however, afforded him the means of refuting these aspersions: Kerguelen sailed again to the Southern Atlantic; and, in December, 1773, again discovered land: by the 6th of January following he had traced its coasts above eighty leagues. It was, however, a barren, inhospitable, and, in general, an unapproachable shore, affording nothing that could satisfy the French nation of the importance of his discoveries. On his return he was accused of culpable indifference to the safety of his men and officers, or rather of purposely exposing those whom he disliked to dangers which eventually proved fatal.

Being unable to exculpate himself, he was deprived of his rank and thrown into prison.

No expedition, fitted out for the purpose of maritime discovery, had ever equalled that from which captain Cook had now returned, in the magnitude and arduous nature of its peculiar object; and none had ever so completely answered its intentions, and performed its task with so little loss of life or injury to the ships. The success of Cook's voyage was gratifying in the highest degree to those who had patronised the undertaking. The earl of Sandwich was still at the head of the admiralty, and felt naturally disposed to reward liberally one whose courage and skill had so well justified his expectations. Cook was immediately raised to the rank of post captain, and obtained a more substantial mark of favour, being appointed one of the captains of Greenwich hospital, which afforded him a liberal maintenance and repose from his professional labours. In February, 1776, only a few months after his return, he was elected a fellow of the Royal Society; and on the evening of his first appearance there, a paper was read containing an account of the method he had taken to preserve the health of the crew of his majesty's ship the Resolution during her voyage round the world. The humane and successful attention which Cook bestowed on his ship's company was soon after rewarded by the Copley medal, a prize annually bestowed by the Royal Society on the author of the best experimental paper of the year. In the discourse which the president, sir John Pringle, delivered on the occasion of bestowing the medal, he uses the following emphatic expressions: —

"What enquiry can be so useful as that which has for its object the saving the lives of men? and where shall we find one more successful than that before us? Here are no vain boastings of the empiric, nor ingenious and delusive theories of the dogmatist; but a concise and artless, and an uncontested, relation of the means by which, under divine favour, captain Cook with a company of 118 men performed a voyage of three years and

eighteen days throughout all the climates from fifty-two degrees north to seventy-one degrees south latitude, with the loss of only one man by sickness. I would now enquire of the most conversant with the bills of mortality, whether, in the most healthy climate, and the best condition of life, they have ever found so small a number of deaths within that space of time? How great and agreeable, then, must our surprise be, after perusing the histories of long navigations in former days, when so many perished by marine diseases, to find the air of the sea acquitted of all malignity; and, in fine, that a voyage round the world may be undertaken with less danger, perhaps, to health than a common tour in Europe!"

The great question, as to the existence of a southern continent, was finally set at rest by the result of this voyage; not but that immense tracks of land might exist in the neighbourhood of the south pole. But Cook's researches reduced the limits of the southern continent, if it exist at all, within such high latitudes, as completely to dispel all those hopes of unbounded wealth and fertility with which imagination had hitherto graced that undiscovered country. One grand problem still divided the opinions of speculative geographers, and eluded every attempt made at a practical solution. The English nation had always felt a peculiar interest in the question of a north-west passage. Their earliest and most constant efforts in the career of discovery were directed towards Hudson's and Baffin's Bays in search of a communication with the Pacific Ocean, so that they might sail by a shorter navigation to China and Japan. In consequence of the disputes between Mr. Dobbs and captain Middleton, respecting the feasibility of the scheme, the agitation of the question was tolerably recent in the public mind, and government adopting the views of the former gentleman, a reward of 20,000*l.* was offered by act of parliament to those who should discover the desired passage.

The British government, captivated with the glory that might result from expeditions destined for the im-

provement of science, resolved now to direct its exertions towards the north-west; and, as a preliminary measure, captain Phipps (afterwards lord Mulgrave) was despatched towards the north pole, to ascertain how far navigation was practicable in that quarter. After struggling obstinately with innumerable difficulties and dangers, arising from the quantity of ice that beset him, he was obliged to return, after having penetrated to the latitude of 80° 30′, or within 9½° of the terrestrial pole.

The hope of finding a passage between the Atlantic and Pacific Oceans was not, however, abandoned; and consultations were held by lord Sandwich with sir Hugh Palliser, and other experienced officers, relative to the plan which should be adopted in the expedition, and to the choice of a commander. Captain Cook had earned, by his eminent services, the privilege of honourable repose; and no one thought of imposing on him, for the third time, the dangers and hardships of a voyage of discovery round the world: but being invited to dine with lord Sandwich, in order that he might lend the light of his valuable experience to the various particulars under discussion, he was so fired with the observations that were made on the benefits likely to redound to science, to navigation, and the intercourse of mankind, from the projected expedition, that he voluntarily offered to take the command of it himself. This proposal was too much in accordance with the wishes of lord Sandwich to be rejected through motives of mere delicacy; and captain Cook was appointed accordingly to the command of the expedition in February, 1776. The act of parliament, passed in 1745, which secured a reward of 20,000 pounds to ships *belonging to any of his majesty's subjects*, which should make the proposed discovery, was now also amended so as to include ships *belonging to his majesty*, and proceeding in *any direction*, for the old act referred only to ships which should find a passage through Hudson's Bay; whereas Cook was directed by his instructions to proceed into the Pacific Ocean, and to commence his researches on the north-west coast of

America, in the latitude of 65°; and not to lose time in exploring rivers or inlets until he had reached that latitude.

The vessels fitted out for this voyage were the Resolution and Discovery, the latter under the command of captain Edward Clerke. Messrs. Bayley and Anderson, who had both accompanied captain Cook in his preceding voyage, now embarked with him a second time, the former in the capacity of astronomer, the latter in that of naturalist. Omai, who, during his residence in England, had been treated with great kindness, and loaded with presents from all quarters, now prepared to return to his native country; but the joy which he felt at the idea of returning to his relations in possession of inestimable riches (for such the gifts with which he was loaded appeared to him to be,) scarcely equalled his regret at quitting shores where he experienced so much kindness and attention, and where the multiplicity of strange objects presented to his view awakened him as it were to a new existence.

On the 12th of July, 1776, captain Cook sailed from Plymouth Sound on his third voyage of discovery. In Table Bay, near the Cape of Good Hope, he was joined by captain Clerke, whose departure had been unavoidably retarded. Here both the ships increased their freight of live stock, consisting of cows, horses, sheep, and goats, which were destined for the supply of the islands in the South Seas. On the 30th of November our navigators left the Cape of Good Hope; and, on the 12th of the following month, two small islands were descried: they had been previously discovered by Marion and Crozet; but not having received any name from them, captain Cook called them *Prince Edward's Islands*. They appeared to be bleak and desolate, with bold rocky shores, and mountains in the rear, the sides and summits of which were covered with snow. Though it was now summer in the southern hemisphere, the weather was as severe as it usually is in England in the depth of winter.

On the 24th high land was again seen, which proved to be that discovered not long before by the French navigator, Kerguelen. A bottle was found on shore containing a piece of parchment, with an inscription written by him, intimating that he had visited this country in 1772 and 1773. Cook wrote the names of his ships and the date of his voyage on the other side of the parchment, which he then replaced in the bottle. This country appeared, as far as the eye could reach, to be little better than a huge assemblage of bare rocks; it had a little herbage, but not a single shrub or tree. Some verdure, which from the sea had an enticing appearance, was found, on nearer approach, to be occasioned by a small plant resembling saxifrage, which, with a few species of mosses and lichens, constituted the whole vegetable productions of this inhospitable shore. Fresh water, however, was abundant, and the rocks were covered with penguins and with seals: the latter so unused to be disturbed, that they evinced no timidity; and as many as were wanted for their oil or skins were killed without difficulty. Cook found that Kerguelen's Land, instead of being a continent, as its first discoverer had supposed, was only an island, extending in breadth from north to south not more than 100 miles. He did not wish to change the name which it had received from its first discoverer, but that which he suggested as extremely applicable to it — The Island of Desolation, — has since been generally adopted in English maps. Soon after leaving this desolate coast, our navigators fell in with winds from the north, which brought on so dense a fog that the ships ran above 300 leagues in the dark: they could rarely descry each other, and it was necessary to fire guns continually to prevent the inconvenience of a separation. At length, on the 26th of January, 1777, the ships anchored in Adventure Bay, on the southern coast of Van Diemen's Land. Here their first care was to collect grass for the cattle, which had suffered much from the severity of the weather and the distresses of a long sea passage. Two young bulls, one heifer, two

rams, and several of the goats, had died while the ships were employed in the survey of Kerguelen's Land.

While the English remained here they were agreeably surprised by a visit from some of the natives, who in their abject misery, rooted indolence, and stupidity, appeared to be on an equality with the wretched inhabitants of Tierra del Fuego. Their most comfortable dwellings were the trunks of large trees hollowed out by fire. They appeared to be ignorant of the art of fishing; not a single canoe was seen on their whole coast. Their chief subsistence was derived from small birds and shell-fish, which they collected along the shore.

A sufficient supply of fodder being procured for the cattle, captain Cook left Van Diemen's Land, of which, relying on the erroneous conclusions of captain Furneaux, he observes, "It is well known to be the southern part of New Holland."

The ships anchored on the 12th of February in their old station in Queen Charlotte's Sound. On their arrival in New Zealand there were but two invalids in both the crews. Captain Cook was not a little surprised at the shyness and mistrust of the natives, most of whom were known to him, and had experienced his kindness on his former voyages; but he soon discovered the cause of their timidity. Omai was on board the Adventure with captain Furneaux on the former voyage, when ten of the crew of that vessel, as above related, fell victims to the ferocity of the natives. Seeing Omai now on board the Resolution, they judged that captain Cook could not be ignorant of the affair, and dreaded his vengeance in consequence; but as soon as he understood the cause of their mistrust he laboured to convince them of his friendly intentions, assuring them that he had no design of retaliating on them for the consequences of an affray to which he was a stranger; and that so long as they conducted themselves peaceably they might consider him as their friend. A chief named Kahoora frankly avowed that he had acted a principal part in cutting off captain Furneaux's people, and that he had himself killed Mr. Rowe their

commander. The attack was not, it appears, premeditated, but had its origin in a theft committed by one party and resented with hasty violence by the other; but when captain Cook declared his willingness to forgive, he soon regained the confidence of the natives. To one chief he gave two goats, a male and a female, with a kid; and to another, two pigs. It was his intention at first to have left here some sheep also, along with a bull and two heifers; but fearing that the chiefs whom he found on this part of the coast were not powerful enough to protect the cattle from those who might ignorantly aim at destroying them, he changed his plan. He learned from the natives that the poultry which on former occasions he had left on the island had increased, the garden vegetables, though neglected, yet multiplied naturally, and some of them, as the potato, were greatly improved by the richness of the soil. At the request of Omai he consented to take with him two youths from New Zealand, who seemed at first delighted with the change; but when they completely lost sight of their native country, they were overwhelmed with violent grief, which continued for many days.

On the 25th of February the ships sailed from Queen Charlotte's Sound, and nothing remarkable occurred till the 29th of the following month, when land was discovered, which proved to be an inhabited island, called by the natives *Mangeea*. It was found impossible to land upon it for the surf. The natives spoke a language differing but little from that of the Society Islands, and were a handsome vigorous people, resembling Spaniards in complexion. They wore white turbans on their heads, made of cloth like that of Otaheite; they also wore sandals, woven apparently with a strong grassy substance. One of them who ventured on board the ship happened to stumble over one of the goats, and immediately asked Omai what *bird* it was. This apparent blunder of the simple islander will appear less surprising when we reflect, that the name of a bird was perhaps the only general term for animals in his language; and there-

Islands, who treated our navigators with a lavish generosity worthy of a sovereign. Tongataboo, or Amsterdam Island, is the centre of his insular dominions, which extends, according to the natives, over 150 islands. Several of these, indeed, are low rocky islets, without any inhabitants. About thirty-five of them are said to be larger, and must consequently be of much greater extent than Anamooka, which is ranked among the smaller isles. It is probable that the Prince William's Islands of Tasman, and the Keppel's and Boscawen's Islands of captain Wallis, are comprehended in this list of islands subject to Tongataboo.

When Poulaho was asked in what manner the inhabitants of this latter island had acquired the knowledge of iron, he replied that they had at first received it from a neighbouring island called Neeootabootaboo. A ship had touched at that island a few years before, and had purchased a club from one of the natives for five nails which were afterwards sent to Tongataboo. This was the first iron known among them, and there can be little doubt that the ship from which it was procured was the Dolphin. If Poulaho's description of this island be compared with captain Wallis's narrative, it will appear evident that Neeootabootaboo is the same as Keppel's Island.

But the most considerable islands within the knowledge of these people are Hamoa, Vavaoo, and Feejee. The two former are the largest islands under the dominion of Tongataboo; and from the information which captain Cook received, it would appear that the inhabitants of Hamoa had outstripped the other islanders in arts and refinement. Feejee was hostile to Tongataboo, and its inhabitants were regarded with dread by the natives of the Friendly Islands for their fierceness in battle, and their savage practice of devouring their enemies. The men of Feejee, while they retain this barbarous custom, are not inferior to their neighbours in art and ingenuity. Before captain Cook left the Friendly Islands he repaid the kindness of Poulaho by a gift of

inestimable value, consisting of live stock, horses, cows, sheep, and goats. The islanders seemed gratified with the gift, and promised not to kill any of the animals until they had multiplied to a considerable number. On touching at Eooa our navigators were supplied with turnips, the produce of some seed scattered by them here on a former voyage.

After remaining at the Friendly Islands between two and three months, during which time he became minutely acquainted with their geography, and the character of their inhabitants, Captain Cook at length took his departure from them, and on the 12th of August arrived at Otaheite. He found that a Spanish ship had touched here in the mean time, and had put on shore some cattle, of which a bull alone remained alive. He felt great pleasure, therefore, in augmenting the stock of the island with three or four heifers, besides a horse and mare, which were intended as a present to the king, Otoo. Two days after their arrival here captains Cook and Clerke mounted on horseback, and took a ride round the plain of Matavai; to the great surprise of a multitude of the natives who attended upon the occasion, and gazed on the horsemen with as much astonishment as if they had been centaurs. What the two captains had begun was afterwards repeated every day by the other ship's officers, notwithstanding which the curiosity of the Otaheiteans still continued unabated. They were exceedingly delighted with these animals when they saw the use that was made of them. Not all the novelties put together which European visiters had carried among the inhabitants, had inspired them with so high an idea of the greatness of distant nations. Otoo was by no means ungrateful for the benefits conferred on him; he offered a small double canoe, very elegantly finished, as a present to king George; and he manifested his sense of respect still more strongly in expressing a wish that the English would establish a permanent settlement on the island. During this visit to Otaheite captain Cook had an opportunity of witnessing the fearful excesses to which these

fore the only one applicable to a creature like the goat, not belonging to any of the species with which he was already acquainted.

Some leagues to the north of Mangeea another island was discovered, which the natives called Wateeo. Here our navigators went on shore, and were conducted by crowds of admiring natives to the chief, who hospitably entertained them. Some plan, however, seemed to be concerted to separate the English, and to cut them off from their retreat to the ships; and perhaps the Indians were chiefly deterred from the execution of this plot by the exaggerations of Omai, who relating the wonders he had seen in England, described guns or instruments of war so large, that many men could sit within them, and which at one discharge could sink the island in the ocean. When questioned respecting the guns on board the ship, he said that they were capable of destroying immediately all the people on the island, though the ships were at that time a considerable distance from the shore. His story was not at first implicitly believed; but as he took delight in exciting the wonder of those who were simpler than himself, he heaped together a few cartridges, which he carried in his pocket, and then throwing on them some red hot embers, the conflagration and report that ensued appeared to the natives so astonishing, as sufficiently to confirm all that he had related. They were consequently more cautious of giving offence to the English, who on the approach of evening were allowed to return to the ships.

On this island Omai met with three of his countrymen, whose surprising adventure most happily illustrates the manner in which the scattered islands of the great ocean might have been originally peopled. About twenty persons of both sexes had embarked in a canoe at Otaheite, to cross over to the neighbouring island of Ulietea. For this short passage they had taken but a moderate stock of provisions. A violent tempest arose, which drove them they knew not whither for many days. They had nothing to eat or drink, and their numbers

daily diminished, worn out by hunger and fatigue. At length the canoe overset, when four only remained alive, and the destruction of this small remnant seemed now inevitable. They clung, however, to the sides of their vessel for some days, and providentially drifted towards this island, when the natives immediately sent out canoes and brought them ashore. Of the four who were thus saved one had since died; the remaining three were so well satisfied with the kind treatment they had received, that they rejected the offer made to them at Omai's request of a passage to their native island. As the inhabitants of the archipelagoes in the great ocean are frequently at sea, crossing from one island to another with their wives and families, accidents like this, which transported four individuals a distance of 200 leagues, are likely to be of frequent occurrence. At all the islands which our navigators had discovered since their departure from New Zealand, they had been disappointed from the want of good anchorage and other circumstances, in their hope of finding water and provisions. The season was now far advanced, and large supplies of provisions would be necessary before proceeding into high northern latitudes. The prosecution of discoveries, therefore, in that direction was unavoidably postponed till the following year, as it was now much too late to venture into unknown seas with the prospect of achieving any thing important. Captain Cook determined to employ the intervening time in examining more minutely the seas between the tropics.

He accordingly directed his course to the Friendly Islands, and on the 1st of May arrived at Anamooka. Here he experienced the kindest treatment from a chief named Fenou, by whose persuasions he was induced to go to Hepaee, a large island, or rather a cluster of islands, connected together by reefs passable at low water, and situated towards the north of this archipelago. The abundance of provisions which he found at Hepaee justified the representations of his friend Fenou. Here also he met with Poulaho, the king of the Friendly

social islanders are hurried by superstition, and of observing the number of human sacrifices offered to their idols, on every occasion of war or other general excitement.

It only remained now to settle Omai in the island of Huaheine, which had been chosen as his residence. A piece of ground was allotted to him by the chiefs of the island; a comfortable wooden house was erected for him by the carpenters of the ships. All the treasures which he had brought from England were landed, and the two young men from New Zealand, though reluctant, were prevailed on to remain with him, so that his family consisted altogether of twelve or thirteen persons. In order to deter the natives from treating him with injustice or violence, captain Cook spoke of returning at no great distance of time. Omai did not live long to enjoy his good fortune; it does not appear that he had any reason to complain of the rapacity or covetousness of his neighbours. The numerous articles of European manufacture which were in his possession, rendered his house a splendid museum of curiosities in the eyes of a South Sea islander; and it is possible that his pride felt gratified in being thus able to minister to their wonder and admiration. He conducted himself prudently, and gained the esteem of his neighbours by the affability with which he recounted his voyages and adventures. About two years and a half after captain Cook's departure, Omai died a natural death; nor did the New Zealanders survive him long enough to furnish European navigators with an ampler account of the influence which his experience and observations abroad may have exerted on his countrymen.

CHAP. VI.

COOK'S THIRD VOYAGE CONTINUED.

THE SANDWICH ISLANDS DISCOVERED BY COOK. — HIS ARRIVAL AT NOOTKA SOUND. — MANNERS OF THE PEOPLE. — EXAMINATION OF THE AMERICAN COAST. — COOK'S RIVER. — DISTANCE BETWEEN ASIA AND AMERICA DETERMINED. — THE SHIPS STOPPED BY ICE IN THE POLAR SEA. — THE RUSSIAN FUR TRADERS. — ENTERPRISE OF LEDYARD. — RETURN TO THE SANDWICH ISLANDS. — OWHYHEE SURVEYED. — FRIENDLINESS OF THE NATIVES. — THE SHIPS LEAVE THE ISLAND, BUT ARE OBLIGED TO RETURN. — ALTERED CONDUCT OF THE NATIVES. — BOAT STOLEN. — FATAL AFFRAY. — DEATH OF COOK. — SECOND ATTEMPT TO NAVIGATE THE POLAR SEA. — DEATH OF CAPTAIN CLARK AND OF ANDERSON. — ARRIVAL AT MACAO. — GENEROUS CONDUCT OF THE FRENCH GOVERNMENT. — SALE OF FURS IN CANTON. — EFFECT OF SUDDEN RICHES ON THE SEAMEN. — RETURN OF THE EXPEDITION. — MERITS OF COOK. — HIS DISCOVERIES. — HIS SURVEYS AND OBSERVATIONS. — CARE OF HIS SEAMEN'S HEALTH. — RESULTS OF HIS VOYAGES. — NEW HOLLAND COLONISED. — TRADE IN THE PACIFIC.

On the 8th of December our voyagers left Borabora, and lost sight of the Society Islands; their course was towards the north, and, on the 18th of January, in lat. 21° N., land was discovered, which proved to be an island of considerable size, and beyond it two others successively became visible. As the ships approached the second island, a number of canoes came off from the shore, and the English were no less pleased than surprised to hear the natives speaking the language of Otaheite. When they came on board, they expressed their astonishment at the numerous strange objects that met their eyes with more lively emotions than captain Cook had ever yet witnessed among savage nations. They did not appear to be quite ignorant of iron, yet the wonder and surprise they displayed at every thing they saw left little room to doubt that they were wholly

unacquainted with Europeans. When captain Cook went on shore, the people fell flat on their faces before him, as if rendering homage to a superior being. The island was amply provided with the necessaries of life; pigs, fowls, and fruits were purchased advantageously; and captain Cook made an important addition to the natural wealth of the island, by putting on shore some of his live stock. Among other articles brought by the natives for trade were cloaks and helmets, beautifully made with red and yellow feathers. These islanders were not inferior to the inhabitants of the more southerly groups in ingenuity or friendliness of disposition. They seemed to captain Cook to be less fickle and voluptuous than the natives of Otaheite, and less sullenly grave than those of Tongataboo; but his growing partiality to them was checked on discovering that they occasionally banqueted on human flesh. Of the group now for the first time visited, only five islands were seen by captain Cook, and to these, in compliment to his noble patron, the first lord of the admiralty, he gave collectively the name of the *Sandwich Islands*.

It only remained now to accomplish the specific object of the voyage, by examining the north-west coast of America, and particularly by trying to effect a passage into the Atlantic Ocean, round the northern extremity of that continent. On the 7th of March our navigators made the coast of New Albion in lat. 44° 33′. The inhabitants of this country were clad in furs which they offered for sale; they conducted themselves civilly towards the English, but were remarkably tenacious of the rights of property, and expected payment for every thing, even the wood and water which the strangers took from the shore. They displayed considerable ingenuity, and were acquainted with iron, although in all their dealings they gave the preference to brass, in consequence of which the sailors, in bartering for furs, parted with all their buttons. Among other articles procured from these people by exchange were two silver spoons, which, as well the iron, were supposed by captain

Cook to have been obtained by a circuitous inland trade, either from the Spaniards in Mexico, or the English factories in Hudson's Bay. He was not aware that this coast had been surveyed by the Spaniards four years previously; and that while the Spanish vessels lay here, the natives had exercised with great success their thieving propensities: to this part of the coast he gave the name of *King George's Sound*, but the native name of Nootka has since prevailed.

On leaving Nootka Sound, the violence of the wind compelled him to keep at a distance from the shore, so that for some degrees he was foiled in his intention of surveying it; but, in lat. 59°, he entered another wide inlet, to which he gave the name of *Prince William's Sound*, and here was surprised to find that the natives, in dress, language, and physical peculiarities, were exactly like the Esquimaux of Hudson's Bay. Beautiful skins were obtained in plenty from these people for a very moderate price. On proceeding to the north-west, a wide inlet was discovered, which some conjectured might be a strait communicating with the Northern Ocean. It was deemed, therefore, advisable to explore it; but when the boats had proceeded as high as lat. 61° 34′ or about 70 leagues from the entrance, the inlet appeared to terminate in a small river. The ships now proceeded to the west, and doubled the great promontory of Alashka; and, on the 9th of August, they reached the most westerly point of the American continent, distant only 13 leagues from the opposite shores of Asia. To this headland Cook gave the name of *Cape Prince of Wales*. Crossing the strait to the western shores, he anchored near the coast of the Tshuktzki, which he found to extend many degrees farther to the east than the position assigned to them in the maps of that day. He thus ascertained distinctly the width of the strait that separates Asia from America; for though Behring had sailed through it before, he had not descried the shores of the latter continent, and, consequently, remained ignorant of the importance of his discoveries. Our navi-

gators now pushed forward into the Northern Ocean, when they soon fell in with ice, which gave them reason to suspect the impossibility of continuing their voyage much farther. At length, on the 18th of August, when after repeated struggles they had attained the lat. of 70° 44', they saw the ice before them, extending as far as the eye could reach, forming a compact wall about six feet high: it was covered with a multitude of walruses or sea-horses, which, though coarse food, were preferred by the seamen to salt provisions.

It was now obviously impossible to advance, and Cook therefore resolved to employ the winter in completing his survey of the Sandwich Islands, and to renew his attempts in the Northern Ocean in the course of the following summer. On his arrival at Oonalashka he received, through the hands of the natives, a present of a salmon pie, and a note which, though unintelligible, was known to be Russian. Corporal Ledyard, of the marines, who afterwards became so distinguished as an enterprising traveller, now for the first time figured on the scene, and volunteered to go in search of the hospitable Russians. He was accordingly packed between the legs of two Esquimaux in a kajack or covered canoe, and in this uncomfortable state was rowed a distance of fourteen miles. In two days he returned with three Russian furriers; and shortly after, a Russian merchant, named Ismiloff, arrived, who showed captain Cook two charts, which satisfied our great navigator as to the limited acquaintance which the Russians had with the north-west coast of America, and the undisputed merit of his own discoveries.

On the 26th of November, in lat. 20° 55', our navigators discovered Mowee, one of the Sandwich Islands which they had not visited; and on the last day of the month another great island, called Owhyhee, was discovered, which, as it appeared to exceed very far in magnitude and importance the other islands of the group, engaged a proportionate share of attention, and captain Cook employed seven weeks in sailing round and survey-

ing its coasts. At length the ships came to an anchor in *Karakakooa Bay*, on the south side of the island. The natives came off to the vessels in canoes laden with provisions, and in such multitudes, that captain Cook in the whole course of his voyages had never seen so numerous a body of people assembled in one place. Many hundreds of them were swimming round the ships like shoals of fishes. The interesting novelty of this scene compensated our voyagers, in some degree, for the disappointment they had experienced in their expedition to the north. "To this disappointment," says captain Cook, "we owed our having it in our power to revisit the Sandwich Islands, and to enrich our voyage with a discovery, which, though the last, seemed in many respects to be the most important that had hitherto been made by Europeans throughout the extent of the Pacific Ocean." Such is the concluding sentence of our great navigator's journal.

The intercourse of our people with the islanders was an uninterrupted series of acts of kindness on both sides, the mutual harmony being only momentarily disturbed by the thieving propensities of the natives. Provisions were procured in the greatest abundance, and captain Cook made the experiment of salting a quantity of pork for sea stores; and he succeeded so completely, that when the ships returned to Europe, some of the pork cured in the Sandwich Islands was found to be still in good order. A society of priests on the island were particularly active in forwarding the views of the English, and procuring them the sort of provisions they required. They even sent a large quantity to the ships as a present. The king of Owhyhee, Tereeoboo, was actuated by the same friendly zeal as his subjects; and in his dealings with captain Cook evinced sincere attachment, as well as the liberality befitting a prince. The islanders had conceived a particular liking for lieutenant King, and warmly solicited him to remain among them. When the day of departure arrived, they seemed inconsolable at

their loss, and heaped whatever presents their island afforded on Cook and his companions.

Such were the friendly sentiments of the natives when the ships sailed out of Karakakooa Bay, on the 4th of September. It was captain Cook's intention to make a complete survey of the islands; but before he had proceeded far a gale of wind came on, in the course of which the Resolution sprung her foremast in so dangerous a manner, that it was deemed necessary to return to Karakakooa Bay in order to repair it.

When the ships arrived at their old anchorage, the bay was found to be nearly deserted. The crowds who had been drawn together by the traffic opened with the ships, had now returned to their habitations through the country; and it was, perhaps, owing to the absence of the chiefs, that the natives, who now came on board, carried on their depredations with much greater boldness than formerly. The punishment of the thieves gave rise to quarrels; and the intercourse with the islanders, though it had not altogether lost an amicable character, was embittered by constant jarring and complaint. A boat was sent in pursuit of a native who had stolen the tongs from the smith's forge; but the crew, and the officer who commanded them, were disarmed and roughly handled by the islanders. Soon after, a party of the natives took away in the night the Discovery's large cutter, which lay swamped at the buoy of one of her anchors. This was a matter of too much importance to be overlooked, and Captain Cook was resolved to have recourse to decisive measures to recover the boat. He had often found the advantage in the South Sea Islands of seizing some of the principal people as hostages on such occasions, and he determined in this instance to make Terecoboo himself answerable for the recovery of the cutter. Armed boats were stationed at each end of the bay to intercept all canoes that might attempt to get out, while captain Cook himself proceeded to land with a party of marines, his crew being also armed.

When he went on shore, the natives flocked around

him as usual, prostrating themselves, and showing the customary marks of respect. He proceeded to the habitation of the king, whom, after some trouble, he persuaded to go on board. To this movement, however, the natives were generally averse; yet they offered no violence to captain Cook as he led the king, with his two sons, through the crowd to the water side, where the marines were drawn up in case of attack. The old king followed with submission and apparent indifference; but when he came near the water's edge, his wives and relations became so importunate to prevent his entering the boat, that he sat down on the ground, and captain Cook was obliged to relinquish the idea of making himself master of his person. There was now a great ferment among the natives, who were gathered in immense multitudes along the shore. Their alarm at the attempt made to entrap their king was heightened by an unfortunate occurrence that took place at a little distance; the boat stationed at the west end of the bay, seeing a large canoe put off from shore, fired a gun ahead of it to stay its progress, and the shot accidentally killed Kareemoo, a chief of distinction. When this intelligence reached them, the agitation of the crowds at the landing-place rose into fury. They put on their war-mats, gathered large stones, brandished their knives, and exhibited in every way an insulting and menacing attitude. Notwithstanding the imminence of the danger, captain Cook would not allow the marines to fire, still hoping that the affair might terminate without shedding of blood. He discharged his musket, indeed, loaded with small shot, at a chief who approached him with threatening gestures; but the shot rattling harmlessly off the thick matting, served only to embolden the infuriated savage. The marines as well as the crew of the pinnace now fired upon the crowd; but the multitude of the islanders was so great, that they could not easily retreat when daunted by the firing; and, rushing upon the marines, forced them into the water, where four of them were killed. The pinnace was so crowded by

those who had been saved from the shore, that her crew were in a great measure prevented from using their fire-arms, and thus afforded little protection to captain Cook, who now remained alone upon the rock. "He was observed making for the pinnace, holding his left hand against the back of his head to guard it from the stones, and carrying his musket under the other arm; an Indian was seen following him, but with caution and timidity, as if undetermined to proceed; at last he advanced upon him unawares, gave him a blow on the back of the head with a large club, and then precipitately retreated. The stroke seemed to stun captain Cook; he staggered a few paces, then fell on his hand and one knee, and dropped his musket. As he was rising, and before he could recover his feet, another Indian stabbed him in the back of the neck with an iron dagger. He then fell into the water, about knee deep, where others crowded upon him and endeavoured to keep him under; but struggling very strongly with them, he got his head up, and casting his eyes towards the pinnace, seemed to solicit assistance. Though the boat was not above five or six yards distant from him, yet, from the crowded and confused state of the crew, it seems, it was not in their power to save him. The Indians got him under again, but in deeper water: he was, however, able to get his head up once more; and being almost spent in the struggle, he naturally turned to the rock, and was endeavouring to support himself by it, when a savage gave him a blow with a club, and he was seen alive no more. They hauled him up lifeless on the rocks, where they took a savage pleasure in using every barbarity to his dead body; snatching the daggers out of each other's hands, to have the horrid satisfaction of piercing the fallen victim of their barbarous rage."

The lieutenant who commanded in the launch was at no great distance during the whole of this affray, of which he remained an unconcerned spectator. To his want of intelligence or of courage the fatal events of the day may, in a great measure, be attributed. But what seems more remarkable, although the fire from the boats

at length succeeded in putting the Indians to flight, and the remains of captain Cook lay for some time deserted on the beach, yet the lieutenant returned to the ships without making any attempt to recover the dead body of his unfortunate commander. It was not without extreme difficulty, and until after repeated negotiations and threatening, that captain Clerke could succeed in recovering the principal part of captain Cook's bones, which were committed to the deep with the usual naval honours amidst the sincere lamentations of the afflicted crews.

As soon as the Resolution had undergone the necessary repairs, the ships hastened to leave a scene which recalled to the recollection of every one on board a calamity outweighing all the satisfaction that could result from the success of the expedition. Captain Clerke now took the place of the lamented Cook, and was succeeded by lieutenant Gore in the command of the Discovery. After leaving Owhyhee, the ships touched at the island of Atooe, which was found desolated by a war originating in the claims of different chiefs to the goats which captain Cook had put on shore. These animals had increased to six when the war broke out on their account, in the course of which they were all destroyed. The history of the introduction of useful animals into the South Sea Islands affords many parallel instances of human blindness, and of that barbarous degree of envy and rapacity which destroys a treasure rather than leave it in the possession of a rival.

Captain Clerke proceeded now to execute the intentions of his late commander, by repeating the attempt to find a passage through the Northern Ocean. He touched at the harbour of St. Peter and St. Paul in Awatska Bay, where he was treated by the Russians with unbounded hospitality; and then passing Behring's Strait a second time, penetrated as far as 70° 33′ N., where the same obstacle which had prevented the progress of the ships the preceding year forbade him to advance any further. He met here with a firm barrier of ice, seven leagues farther to the south than that which had stopped the

progress of captain Cook. The impossibility of a passage by the north was now thought to be sufficiently proved, and it was resolved to proceed homewards; the chief purpose of the expedition having been thus answered. This resolution of the officers diffused among the crews, who were now heartily tired of the length of the voyage, as lively a joy as if the ships, instead of having nearly the whole earth to compass, were already arrived in the British Channel. When the ships had just reached Kamtschatka, captain Clerke died of a decline: he had already circumnavigated the globe three times, having sailed first with commodore Byron, and afterwards with captain Cook. Mr. Anderson, the talented physician and naturalist of the expedition, had expired at Oonalashka, the preceding year, of the same complaint. Captain Gore now succeeded to the command of the expedition, and lieutenant King took the command of the Discovery. Their voyage to China was not productive of any important geographical results. In navigating those stormy seas they found it necessary to keep at a distance from land, and were thus baffled, by constant tempestuous weather, in their attempt to survey the coasts of Japan.

On the 3d of December our navigators arrived at Macao, where they first became acquainted with the events which had taken place in Europe since their departure, and of the war which had broken out between Great Britain and France. A rumour of the generous conduct of the latter government at the same time reached them: an order had been issued in March, 1779, by the minister of the marine at Paris, to all the commanders of French ships, acquainting them with the expedition and destination of captain Cook, and instructing them to treat that celebrated navigator, wherever they should meet him, as a commander of a neutral and allied power. This measure, so honourable to the nation which adopted it, is said to have originated in the enlightened mind of the celebrated Turgot. Dr. Franklin, who at that time resided at Paris as ambassador from the United States,

had, a short time before, issued a requisition, in which he earnestly recommended the commanders of American armed vessels not to consider captain Cook as an enemy; but he had no authority to enforce his recommendation, and the government of the United States had not the magnanimity to adopt it.

While the ships lay in the river of Canton, the sailors carried on a brisk trade with the Chinese for the sea otter skins which they had brought with them from the north-west coast of America, and which were every day rising in their value. "One of our seamen," says lieutenant King, "sold his stock alone for 800 dollars; and a few prime skins, which were clean and had been well preserved, were sold for 120 each. The whole amount of the value, in specie and goods, that was got for the furs in both ships, I am confident did not fall short, of 3000*l.* sterling; and it was generally supposed that at least two thirds of the quantity we had originally got from the Americans were spoiled and worn out, or had been given away, or otherwise disposed of in Kamtschatka. When, in addition to these facts, it is remembered that the furs were at first collected without our having any idea of their real value; that the greatest part had been worn by the Indians from whom we purchased them; that they were afterwards preserved with little care, and frequently used for bedclothes and other purposes; and that probably we had not got the full value for them in China; the advantages that might be derived from a voyage to that part of the American coast, undertaken with commercial views, appeared to me of a degree of importance sufficient to call for the attention of the public." These observations of lieutenant King point to that which eventually proved to be the most important result of this expedition. A great branch of trade in the Pacific Ocean, which had hitherto escaped the notice of the nations most interested in its developement, and possessing establishments most conveniently situated for carrying it on, was suddenly discovered, and soon after vigorously prosecuted by a ma-

ritime people from the opposite side of the globe. The crews of both ships were astonished, as well as overjoyed, at the price paid them for their furs by the Chinese; and their rage to return to Cook's River, in order to procure a cargo of skins, proceeded at one time almost to mutiny. A few, indeed, contrived to desert, and were among the first adventurers who crossed the Pacific Ocean in the newly discovered *fur trade*. The seamen thus unexpectedly enriched soon underwent a total metamorphosis: they arrived at Macao in rags, many of them having inconsiderately sold their clothing in the South Sea Islands; but, before they left that harbour, they were decked out in gaudy silks and other Chinese finery. Nothing of importance occurred during the remainder of their voyage home; and, on the 4th of October, the ships arrived safe at the Nore, after an absence of four years two months and twenty-two days. In the whole course of the voyage the Resolution lost but five men by sickness, of whom three were in a precarious state of health when the expedition left England: the Discovery did not lose a man.

In order to estimate the merits of captain Cook, it will be only necessary to survey generally the extent and nature of his discoveries, and to examine what influence they exerted immediately on the commercial enterprise of nations. In the extent of the coasts which he surveyed or discovered, he far surpasses every other navigator. The eastern coast of New Holland, 2000 miles in extent, was totally unknown till he traced it; escaping from the dangers of that intricate navigation solely by his cool intrepidity and the resources of his skill. He also circumnavigated New Zealand, the eastern and southern parts of which were quite unknown, and supposed by many to be united to the *Terra Australis Incognita*. New Caledonia and Norfolk Island were both discovered by him; and the New Hebrides, from his labours, first assumed a definite shape in our maps. He rendered an essential service to geography also by his circumnavigating the globe in a high southern latitude; for,

though the exertions and dangers of that difficult navigation were not repaid by any brilliant discoveries, it set at rest a question which had for ages divided the opinions of speculative geographers. Sandwich Land, or Southern Thule, may be numbered among his discoveries, although it is probably the land which Gerritz had descried a century before.

His discoveries on the north-west coast of America were still more important and more extensive. In one voyage he effected more than the Spanish navigators had been able to accomplish in the course of two centuries. In sailing through Behring's Strait, he determined the proximity of Asia and America, which Behring himself had failed to perceive; and he assigned the coast of the Tshuktzki to its true place; which, in many maps of his time, was placed some degrees too far to the westward.

It is needless to recapitulate here the large additions which he made to our knowledge of the groups of islands scattered through the Pacific Ocean. Some of the Society and Friendly Islands were known before his time; but he carefully surveyed those archipelagoes, and fixed the positions of the chief islands, such as Otaheite and Tongataboo, with an accuracy equal to that of a European observatory. He prided himself especially on having discovered the Sandwich Islands; and there is no good reason to refuse him that honour; for, even if it be true that a Spanish navigator, named Gali, discovered those islands in 1576; and that he gave to Owhyhee the name of *Mesa* or *Table* Mountain, which is marked in old Spanish charts twenty-two degrees to the west of the Sandwich Islands, but in the same latitude with them; yet no stress can be laid on a discovery from which mankind derived no knowledge. The Spaniards seem soon to have totally forgotten the Sandwich Islands, if they ever knew them, notwithstanding the advantages which they might have derived from those islands in their frequent voyages from New Spain to Manilla. Anson and many other navigators might have been spared infinite distress and suffering in their voyages across the

Pacific, had any thing certain been known of the existence and situation of the Sandwich Islands.

But Cook's merit is not more conspicuous in the extent of his discoveries, than in the correctness with which he laid down the position of every coast of which he caught a glimpse. His surveys afford the materials of accurate geography. He adopted in practice every improvement suggested by the progress of science; and, instead of committing errors amounting to two or three degrees of longitude, like most of his predecessors, his determinations were such as to be considered accurate even at the present day; nor was this the merit of the astronomers who accompanied him on his expeditions. He was himself a skilful observer, and at the same time so vigilant and indefatigable, that no opportunity ever escaped him of ascertaining his true place. He possessed in an eminent degree the sagacity peculiar to seamen; and in his conjectures respecting the configurations of coasts he very rarely erred. La Perouse, who was a highly accomplished seaman, always mentions the name of Cook with the warmest admiration, and frequently alludes to the remarkable correctness of his surveys. Crozet, also, who wrote the narrative of Marion's voyage, speaking of Cook's survey of the shores of New Zealand, says —"That its exactness and minuteness of detail astonished him beyond expression;" but Cook's skill as a marine surveyor may be still better estimated from the chart which, at the commencement of his career, he constructed of the coasts of Newfoundland; and of that chart, captain Frederick Bullock, the able officer who has recently completed the survey of Newfoundland, speaks in those terms of warm commendation which a man of ability naturally bestows on whatever is excellent.

From the second expedition of Cook may be dated the art of preserving the health of the seamen in long voyages: before that time, navigators who crossed the Pacific, hurried precipitately by the shortest course to the Ladrones, or the Philippine Islands; and yet they rarely reached home without the loss of a large proportion of

their crew. Cook, on the other hand, felt himself perfectly at home on the ocean; he did not care to limit his voyages, either in space of time or of distance; he sailed through every climate, crossing both the arctic and antarctic circles; and proved that a voyage of four years duration does not necessarily affect the health of seamen. This was a discovery of far greater importance than that of a new continent could have been: by his banishing the terror that arose from the frightful mortality that previously attended on long voyages, he has mainly contributed to the boldness of navigation which distinguishes the present day.

Among the immediate effects of captain Cook's voyages, the most important was the establishment of a colony at Botany Bay. That great navigator seems to have contracted a partiality towards the New Zealanders; he admired their generosity, their manly carriage, and their intelligence. Their country appeared to him fertile; abounding in commodities which might become valuable in commerce; and he hints, though with diffidence, to the possibility of a trade being carried on between Europe and New Zealand. His observations on this subject had influence, no doubt, on the minds of the English ministers, and they resolved on establishing a colony at New Holland; and the result has justified Cook's sanguine anticipations. The fur trade also, which soon caused such a concourse of European shipping in the Pacific Ocean, originated with his third voyage; but his familiarity with the South Sea islanders, the trade which he established with them, and the practice which he commenced of purchasing sea stores from them, have had, perhaps, a still stronger influence on navigation in the Pacific.

Finally, to complete the eulogium on this great navigator, it will be sufficient to enumerate some of the distinguished seamen who served under him, such as Vancouver, Broughton, Bligh, Burney, Colnett, Portlock, Dixon, &c.: these men learned under Cook the arduous duties of their profession, and they always spoke of him with unqualified admiration and respect.

CHAP. VII.

VOYAGE OF LA PEROUSE, ETC.

EMULATION OF THE FRENCH. — LA PEROUSE APPOINTED TO COMMAND AN EXPEDITION. — HIS INSTRUCTIONS. — VISIT TO EASTER ISLAND. — ACCOUNT OF THE STATUES. — ARTS OF THE PEOPLE. — SANDWICH ISLANDS. — AMERICAN COAST. — PORT DES FRANÇOIS. — AN ISLAND PURCHASED BY THE FRENCH. — CALAMITOUS OCCURRENCE THERE. — VOYAGE TO MACAO. — JAPANESE SEAS. — COAST OF TATARY. — BAIE DE TERNAI. — SAGALEEN. — INFORMATION DERIVED FROM THE PEOPLE. — STRAITS OF LA PEROUSE. — ARRIVAL AT KAMTSCHATKA. — MONUMENT TO CAPTAIN CLERKE. — M. LESSEPS DESPATCHED OVERLAND TO EUROPE. — NAVIGATORS' ISLANDS. — MASSACRE OF THE FRENCH BY THE NATIVES. — VOYAGE TO BOTANY. — LETTER OF LA PEROUSE. — MYSTERY RESPECTING HIS FATE. — HIS MERITS. — DECREE OF THE NATIONAL ASSEMBLY. — D'ENTRECASTEAUX SAILS IN SEARCH OF HIM. — FATE OF HIS EXPEDITION. — ADVENTURE AT THE FEEJEE ISLANDS. — INFORMATION OBTAINED BY CAPTAIN DILLON AT TUCOPIA. — HE RETURNS TO SEEK VESTIGES OF THE FRENCH. — VISITS MALICOLO. — ACCOUNT OF THE SHIPWRECK GIVEN BY THE NATIVES. — RELICS COLLECTED. — RESULTS.

GREAT BRITAIN now stood pre-eminently distinguished, and was looked up to with gratitude by all civilised nations, for the bold and successful expeditions which she had fitted out in pursuit of geographical discoveries. As soon as the war, commencing in 1778, was brought to a close, in 1783, France, emulous of the glory of a rival nation, hastened to equip a squadron destined to solve those geographical difficulties which Cook had left untouched. The officer chosen to command this expedition was Francis Galaup de la Perouse, an officer of great experience and talents, and who had shown himself particularly fitted to conduct an enterprise of this nature, by his skill in combating the difficulties which thwart navigation in Hudson's Bay, whither in the late war he had been despatched with a squadron to de-

stroy the British settlements. In this affair he had also displayed a generosity in his treatment of the unfortunate colonists, which won him the applause and esteem of the English nation.

The directions given to La Perouse for his voyage were remarkably luminous and instructive; but the plan was too comprehensive to fall within the capabilities of a single expedition. It aimed at little less than the filling up of every chasm, and dispelling every obscurity, that still remained in maritime geography. He was ordered, in his passage to Cape Horn, to examine the southern coasts of Sandwich Land and New Georgia, so as to complete the survey made of these desolate countries by captain Cook. He was then to run in a high latitude to the west, in search of Drake's Land. On approaching the tropics, he was instructed to ascertain correctly the position of Pitcairn's Island, by which means the track of Carteret across the Pacific Ocean, and his various discoveries, might be more accurately fixed. After visiting Quiros's Island of the Handsome Nation, the Santa Cruz of Mendana, and the Salomon Islands, of which Bougainville had visited a portion; after completing the survey of New Caledonia, which Cook had traced only on the eastern side; Perouse was to explore the great Gulf of Carpentaria, on the north of New Holland, and then to return to the Marquesas to rest after his first campaign. The complete execution of what is here prescribed would alone have conferred honour upon any expedition.

The French ships were next to proceed to examine narrowly the north-western coast of America, particularly with a view to discover whether there was any communication with the east. The Aleutian Isles were next to be surveyed; and then the ships, having touched at Kamtschatka, were to proceed by way of the Kuriles and Japan to Manilla and China. Here they were to refresh, and prepare themselves for the most difficult and novel part of their task: this was to explore the eastern coast of Tatary, with which European geo-

graphers had as yet but little acquaintance. The island of Yedzo being surveyed, the expedition was to touch a second time at Kamtschatka, and then to return homeward through the Ladrones, the New Carolinas, and the Moluccas, surveying accurately and fixing the position of every coast at which they arrived. Nor were they to abandon, on their homeward voyage, all further search for the Cape Circumcision of Bouvet, though the fruitless efforts of Cook to find that apocryphal land might have been deemed sufficient proof that it had no existence.

The preparations for this expedition were as complete as its plan was extensive. Two fine frigates, the Bousole and the Astrolabe, were selected for it, and several men of the first eminence in every department of science were prevailed on to accompany it. In the number of these was Monge, who has since risen to distinction as one of the great triumvirate of French mathematicians. But his health was so seriously deranged by sea-sickness, that he quitted the expedition at Teneriffe, and thus saved a life which was destined to contribute so much to the advancement of science. The boldness of design and the extensive geographical knowledge which marked the plan of this expedition, the liberality and care with which it was equipped, and the undoubted ability of all who were engaged in it, might have been deemed sufficient guarantees of its success, and gave rise to the most sanguine expectations; yet it was pursued throughout by a train of bitter misfortunes, and terminated in a lamentable catastrophe, hardly paralleled in the annals of navigation.

The commencement of the voyage was fortunate. The ships having taken refreshment at the island of St. Catharine, on the coast of Brazil, doubled Cape Horn with comparative ease; but nevertheless the voyage round the southern point of the American continent, even under favourable circumstances, was found so tedious and distressing, as to render it inexpedient to launch at once across the Pacific Ocean in pursuit of discoveries.

La Perouse steered, therefore, for Easter Island, of whose inhabitants the French naturalists were enabled to form a juster idea than those who had accompanied captain Cook. The colossal statues which chiefly attract the attention of visitors to this singular island, and which were supposed by the English to be moulded of a composition, were found to be formed of that light volcanic substance called lapillo. The ground, in some places, was cultivated with great care and skill; and the islanders, though fully as ingenious as described by the English, seemed to the French neither so miserable nor so few in number. They lived in villages, and in some instances the inhabitants of a whole district were lodged under the same roof. The great houses which were thus occupied in common were above 300 feet in length, constructed with great care, and resembled in appearance an inverted canoe. If the arts and social improvement of these islanders, rude as they are, be compared with the scanty means with which nature has provided them, they may, perhaps, be reckoned amongst the most extraordinary people in the world.

From Easter Island the French proceeded to the Sandwich Islands to obtain a stock of fresh provisions, and stayed a short time at Mowee, an island which Cook had not surveyed. But nothing occurred of any interest while they remained here, nor were they able to add any thing of importance to the ample information respecting those islands which had already been published by the English navigators.

Perouse now entered on the arduous portion of his labours, in the examination of the north-west coast of America, which he reached in June, 1786, in lat. 59°. Only two or three months now remained to him to examine this coast, as he was bound by his instructions to reach China by February, that he might commence the examination of the Tatarian coast in the ensuing spring. He arrived on the coast of America near Mount St. Elias, from which point, towards the north, the coast had been carefully examined by captain Cook, for whose

memory Perouse had an unbounded veneration; and as he judged that it would be productive of greater benefit to science and more honour to himself, if he were to direct his attention to what that great navigator had left untouched, rather than aim at correcting him, he resolved to run along the coast towards the south, from St. Elias to the Spanish settlement at Monterey.

Not long after the French ships approached the shore, a harbour was discovered, with a narrow entrance, but seductive in its appearance from the smoothness of the water within. After some hesitation the French navigators ventured to enter it, and succeeded in reaching a safe anchorage; but such was the violence of the current at the entrance, that they were in imminent peril of being thrown upon the rocks. "During the thirty years, says Perouse, of my nautical experience, I have never seen two ships so near being lost." The French now proceeded to examine the head of the bay, which appeared to them to be one of the most extraordinary places in the world. To form an idea of it, it is necessary to conceive a basin of water of unfathomable depth, bordered by peaked mountains, elevated and abrupt, covered with snow, and without one blade of grass to decorate this vast heap of rocks, condemned by nature to eternal sterility. The surface of the water is hardly ever ruffled by a breath of wind. Nothing disturbs it but the fall of the enormous masses of ice, which frequently separate from five different glaciers, while the sound is re-echoed by the distant mountains. The air is so calm, and the silence so profound, that the voice of a man may be heard for half a league, as well as the cries of a few sea-fowl, who lay their eggs in the hollows of the rocks.

The French erected their observatory on a small island, of which they took formal possession, having purchased it from the natives. They deemed this harbour an excellent station for carrying on the fur trade, and sufficiently distant from the factories of the Russians, English, and Spaniards, to remove any complaints of en-

croachment on the part of these nations. In the crews of the two ships there was not a single invalid, and the expedition seemed hitherto crowned with success, when a misfortune occurred which threw a gloom over the minds of them all, and alloyed the confidence of hope with melancholy bodings. Three boats were sent to sound the entrance of the harbour, which was rendered difficult of access by the violence of the tides. M. d'Escures, who commanded the surveying party, was counselled by Perouse to proceed with extreme caution. But he, thinking it a display of courage to encounter dangers, the magnitude of which he did not comprehend, approached the rocks, where two of the boats were overwhelmed with the surf, and the third escaped with extreme difficulty. By this melancholy accident twenty-one persons lost their lives. It was afterwards observed that the Indians, in passing the entrance of the harbour, always offered up a prayer to the sun; experience having taught them the danger of being involved in those rapid and eddying currents. *Port des François*, as this harbour was called, was found to be situated in lat. 58° 37′, and west long. 139° 50′.

The ships now proceeded southwards to the Spanish settlement at Monterey. During this part of his course Perouse observed the broken character of the coast, and conjectured the existence of that archipelago which has since been named Queen Charlotte's Islands. The ships having undergone repairs at Monterey, where they arrived in the middle of September, crossed the Pacific Ocean without making any discoveries of importance, fixed the positions of the Ladrones and Bashee Islands, and anchored at Macao on the 2d of January, 1787.

As soon as the necessary arrangements had been made for his second year's voyage, Perouse proceeded to Manilla, whence he sailed in the beginning of April for the express purpose of surveying the east coast of Tatary. In his way he touched at the Pescadore and Loochoo Islands, but without having any intercourse with the inhabitants. He afterwards made the island of Quel-

paert, and ran along the coast of Corea. Cape Noto, on the western side of Japan, was soon afterwards discovered. As Perouse explored these seas, which were but little known to European navigators, with all the advantages resulting from the growth of astronomical science and the improvement of instruments; and as he had before him the example of the indefatigable Cook, to whose vigilance and activity he does ample justice, the observations made by him on the points which fell within his route, were calculated to serve as the basis of a juster geographical delineation.

At length, in the middle of June, the French ships made the coast of Tatary, in lat. 42°, and ran along at a little distance from the shore without perceiving any where the least indication of inhabitants. A harbour was discovered, in lat. 45° 13′, where the ship came to an anchor, and which received the name of *Baie de Ternai*. On going ashore, the French were astonished to find that a country apparently fertile, and loaded with the best gifts of nature, was yet without inhabitants. The vegetation resembled that of France, but was rather more vigorous and luxuriant. Roses and lilies of various kinds covered the ground. The summits of the mountains were clothed with tall pine trees; lower down began the oak forests, which extended, gradually diminishing in loftiness, to the sea shore. Maple, birch, and other trees overhung the borders of the brooks and rivers. Natural orchards of apples, medlars, and hazel skirted the woods. The French, in endeavouring to explore the country, were unable to proceed, from the height of the grass; and the appearance of some formidable snakes, added to the difficulties of impassable meadows, confined them to the shore. Traces of man were found here, but not of his permanent habitation. Trees were seen which had been cut with edge tools, and burial places containing a variety of relics.

On proceeding again to sea, land was discovered to the east; and the French now found that they were sailing in a channel, or deep gulf. They anchored in a bay of

this eastern land, which proved to be the land of Sagaleen, where they had the good fortune to meet with inhabitants—an intelligent, peaceable, and hospitable race—from whom some valuable information was obtained respecting the coast which they were exploring. A native being desired by signs to draw a map of the countries with which he was acquainted, began by drawing on the west a line to represent the sea-coast of Tatary or the country of the Mandchoos, which name he pronounced exactly as the French did. On the west he described an island of great length, which he called *Choka*, and, by pointing to himself, signified that it was his own country. He left a narrow channel between this island and the coast of Tatary, and where it was narrowest, near its northern extremity, he placed the mouth of the river Sagaleen, a name which he also pronounced in such a way as to be easily recognised by the French. The mouth of this river he intimated was distant from his village a voyage of seven days in a canoe. The French were anxious to ascertain the correctness of this information by examining the whole channel to the north; but finding that the sea shoaled uniformly as they advanced in that direction, while, at the same time, the prevalence of the south winds caused a heavy swell, and covered them with perpetual fogs, making it dangerous to proceed and difficult to return, they deemed it imprudent to investigate it any farther. After a tedious navigation to the south, the ships reached the strait which separates the land of Sagaleen or Choka from that of Yesso: to this strait geographers have given the name of La Perouse. The fresh intercourse which our navigators had here with the natives, seemed to confirm the accounts which they had already received respecting the channel in which they had been sailing. They arrived at the conclusion, that Sagaleen is separated from the continent of Asia by a channel, reduced near the mouth of the river Sagaleen to a very narrow width, and too shallow to be navigated by large vessels. In leaving the straits to which he has given his name, Perouse recognised the coasts described in the

voyage of the Castricum, though hitherto the account of the ancient Dutch navigator had been considered as of no authority.

The discoveries made by Perouse in this part of his voyage were of the utmost importance to geography. The island of Sagaleen (if it be really an island and not a peninsula) is one of the largest on the surface of the globe; and yet so obscurely was it known to Europeans, that the Russians, who pretended to a more accurate acquaintance with those seas, even ventured to deny its existence. The land of Yesso, or Yedzo, also, which had hitherto been magnified and coloured through the medium of fable, now began to assume an aspect of reality.

At Kamtschatka Perouse experienced the same cordial hospitality as the English navigators; to the memory of one of whom he had an opportunity of showing a generous attention. A brother of the celebrated French geographer De Lisle had accompanied the expedition of Behring in Tshiricof's ship, in the quality of astronomer; but sickness, which made so many victims among his companions, did not spare him, and his life terminated with the expedition. Captain Clerke, when he arrived at Kamtschatka, sought and discovered the place of interment of a stranger, whom the love of science had carried to the eastern extremity of Asia; and he distinguished the tomb of De Lisle de la Croyère by an honourable inscription. Captain Clerke himself, when he visited Kamtschatka again, after a second run to the northward, closed here his laborious career, and was interred on shore. But time and the climate had effaced the inscription on his tomb: this Perouse took pains to re-establish, and, to prolong its duration, ordered it to be engraved on copper. There is something peculiarly interesting in these mutual attentions of navigators, strangers to each other, but inspired with fraternal feelings by common danger and distance from home; where perhaps the dissociating spirit of national animosity might have forced them to regard each other with the bitterest hatred.

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When the ships were refitted and about to proceed to sea, Perouse obtained permission from the governor of Kamtschatka to allow M. Lesseps, who had accompanied the expedition as Russian interpreter, to proceed to Europe over land. By him were sent to France the journals and surveys of the voyage as far as it had hitherto proceeded. Lesseps accomplished the journey with success, and, being an intelligent young man, was able to convey to Europe much information respecting countries hitherto but little known. He was the first to perform a journey completely across the old world.

Perouse having again put to sea, sailed for some time in the parallel of 37°, seeking in vain for lands marked in the ancient Spanish charts. He then crossed the line for the third time, and arrived at the Navigators' Isles. He anchored at the island of Maouna, where, as the crews now began to feel the want of fresh water and provisions, he hoped to be able to establish a friendly intercourse with the natives. The multitude of canoes seen there, and the familiarity of the island population with the sea, justly entitled the inhabitants of this archipelago, in the opinion of La Perouse, to the title of navigators. The natives of Maouna, with whom the French unfortunately became more intimately acquainted, were a handsome vigorous race, well proportioned, and of great stature; the men being commonly about six feet two inches in height, and at the same time remarkably robust. They looked on the French as pigmies; and the sense of their physical superiority incited them to an insolence and audacity which led at length to fatal results.

The French, observing the utmost forbearance and caution in their dealings with these people, succeeded in obtaining a stock of provisions and water from the island, and Perouse, whose mind seems to have been filled with some presentiment of danger, was anxious to quit the place; but M. de Langle, the commander of the Astrolabe, having discovered, as he thought, a secure little harbour, with a stream of fresh water running into it, was desirous of increasing his stock of this necessary

article, and succeeded in obtaining an assent to his proposition. The boats from both the ships, containing in all sixty-three persons well armed, proceeded to the shore under his command. But the harbour which had so much fixed his admiration was found to be so filled with coral rocks, as to be accessible only by a narrow channel, and it was so shallow within that the boats could hardly approach the beach. Notwithstanding these difficulties, the French commenced their operations of watering.

The natives, at first few in number, lent their assistance; but, as they became more numerous they grew also more insolent, and at length the retirement of the women and children from the crowd gave signs of approaching hostility. The French retreated to the small boats, which alone could approach the shore, and being thus crammed together were less capable of using their fire-arms with effect. The natives now commenced their attack, throwing stones of two or three pounds' weight with uncommon force and precision. The small boats were quickly destroyed, and all those who did not throw themselves into the water on the side remote from the shore, and swim to the cutters, were cruelly massacred, the natives drawing the dead bodies ashore, and mangling them with barbarous exultation. Captain de Langle himself was the first who fell. M. Lamanon, the naturalist of the expedition, and nineteen more, perished in this melancholy affray. When those who escaped reached the ships with an account of the catastrophe, the grief and indignation of the crews rose to a pitch of fury which Perouse found it difficult to restrain. They desired ardently to avenge on the barbarous islanders the deaths of their murdered comrades; but he succeeded in appeasing them in some measure, and averted the evils that must have resulted from giving way to a sally of passion, at best unavailing, and perhaps unjust.

This second misfortune which befel the expedition must have thrown a great gloom over the minds of all

who were engaged in it, and rendered them more suspicious in their intercourse with uncivilised tribes. It might have been owing, in some degree, to this circumstance that Perouse, in sailing by Vavaoo, and some other islands, of which Cook had heard glowing accounts from the Friendly islanders, did not endeavour to establish any communication with the natives. He made little delay in passing through this interesting archipelago, and continued his course to the southward, till he came in sight of Norfolk Island. His naturalists, however, were less fortunate than those who accompanied Cook, and were unable to effect a landing on this sequestered spot.

When the French ships arrived in Botany Bay, where they designed to refit themselves completely for their third campaign, they were overjoyed to see some English men of war lying at anchor there. The meeting of Europeans in the remotest quarter of the globe is like the meeting of old friends and relations. Perouse found that the English, who had come here for the purpose of establishing a colony, were removing their settlement to Port Jackson, a fine harbour situated a few miles to the north. He acknowledges that he received every attention from the settlers and governor of the new colony, with which, as it was distant from them only ten miles overland, he was able to maintain a constant intercourse. By the English ships he sent to Europe the remainder of his journal and charts since his departure from Kamtschatka. In a letter also written from Botany Bay, and dated February 7. 1787, he gives the following intimation of the plan he intended to pursue during the remainder of his voyage:—"I shall proceed," he says, "to the Friendly Islands, and do every thing enjoined in my instructions relative to the southern part of New Caledonia, to the island of Santa Cruz of Mendana, the southern coast of the Land of the Arsacides of Surville, and the Land of Louisiade of Bougainville, and shall endeavour to ascertain whether the latter constitutes a part of New Guinea, or is separated from it by a strait.

Towards the end of July, 1788, I shall pass between New Guinea and New Holland by another channel than Endeavour Strait, if any such exist; and during the month of September and part of October I shall visit the Gulf of Carpentaria, and all the coast of New Holland, as far as Van Diemen's Land; but in such a manner that it may be possible for me to stretch northward time enough to arrive at the Isle of France in the beginning of December, 1788." Such was the tenour of the last communication received from this unfortunate navigator. He sailed from Botany Bay soon after the date of this letter, and nothing was known of his fate till our own days.

La Perouse appears to have been an enthusiastic admirer of captain Cook; and, among the immediate followers of that great man, there was no other who imitated him more successfully in his endeavours to preserve the health of his men. There was but little sickness on board the French ships; and the fatal accidents which took place at Port des François and the Navigators' Isles, are rather to be ascribed to the heedless impetuosity of the French than to the imprudence of their commander. Cook had ascertained with precision the position of so many places in the South Sea, as greatly to facilitate its navigation to those who came after him. In this also La Perouse laudably emulated the fame of our great navigator; and, being accompanied by men of abilities, and provided with the instruments which the advanced state of science rendered desirable, his observations formed a valuable accession to geography. He defined with truth, though not with minuteness, that part of the north-west coast of America which Cook had been prevented from examining; and uniting his survey with those of the English and Spanish navigators, he completed the general outline of that continent. His discoveries on the coast of Tatary were still more important; and, considering the difficulties he had to contend with, reflect the highest credit on his skill and perseverance.

Above two years had now elapsed from the time which La Perouse had fixed on for his return home, and no intelligence whatever could be met with respecting his fate: there could be no doubt, therefore, that he had suffered shipwreck, and had either been swallowed up in the ocean, or, perhaps, still survived with the remnant of his companions on some sequestered island in the South Sea, tormented by the capricious enmity of the barbarous natives, and by the agonising reflection that he was exiled for ever from his native country. These considerations induced the National Assembly to pass a decree in February, 1791, in which they entreated the king of France to communicate with the sovereigns of European nations, and implore them, in the name of humanity, to enjoin their subjects navigating in every part of the world, and particularly in the South Sea, to collect what tidings they could respecting the unfortunate French expedition; and if they met with any of its survivors, to render them all the assistance in their power. The king was at the same time entreated to equip two ships, for the double purpose of investigating the fate of La Perouse and of completing the plans of geographical discovery which he had left unfinished.

The command of this expedition was given to admiral d'Entrecasteaux. On his arrival at the Cape of Good Hope he received an express from India, informing him that among the Admiralty Isles, to the west of New Britain, the commander of a Dutch ship had seen the natives dressed in the uniform of the French navy; whence he concluded that the French ships had been thrown away there. Notwithstanding the intrinsic improbability and imperfect authenticity of this report, which placed the wreck of the expedition so far from its intended course, D'Entrecasteaux found himself obliged to disprove its correctness by ocular examination. Before he sailed from France, a report had been spread there by an English captain, a prisoner of war, that the wreck of a French ship had been seen by him on the south side of New Georgia, a portion of the Salomon Islands.

When D'Entrecasteaux reached the Admiralty Isles he was unable to discover any thing that could countenance the belief that French ships had at any time been lost there: he accordingly resumed his original plan of operations, sailed round New Holland on the west and south, and then proceeded from Botany Bay to examine the route which La Perouse, in his last letter, had intimated his intention to pursue. In order to accomplish satisfactorily the main object of his voyage, and to discover the traces, if any existed, of his shipwrecked countrymen, he made it a rule to sail as near the shore as could be done with safety; and this circumstance, added to the minuteness of his surveys and the accuracy of his observations, rendered this voyage productive of much geographical information; not, indeed, in discoveries of magnitude or importance, but in the exact delineation of long lines of coast. The observations of the naturalist La Billardière, who accompanied the expedition, have also contributed much to improve our knowledge of the productions of the globe. D'Entrecasteaux, however, could find no vestiges, nor collect any tidings, of La Perouse: he was satisfied, from his examination of the natives, that that unfortunate commander had never visited the Friendly Islands. On his return home the French admiral saw at a distance one of the Queen Charlotte group, which he named *Isle de Recherche*, and which, by a strange fatality, he omitted to examine as narrowly as he was accustomed. He died soon after, as well as the officer second in command. Sickness made such ravages among the crews, that nearly one third of the men was carried off before the arrival of the expedition at Java; where, to complete the train of misfortunes, the ships were seized by the Dutch as prizes, and the officers learned the fatal events of the French revolution, by which they were deprived of their commissions.

Thus terminated the expedition of D'Entrecasteaux, hardly less unfortunate than that which it went in search of. The confusion in which France was plunged pre-

vented any further undertaking in search of La Perouse; and nearly forty years elapsed before a single ray of light appeared to dispel the cloud of mystery that hung over his fate.

In September, 1813, the Bengal ship Hunter, commanded by captain Robson, touched at the Feejee Islands to procure a cargo of sandal wood. The natives are now accustomed to trade with Europeans, sometimes assisting in furnishing the cargo, and are repaid for their trouble chiefly by fire-arms and ammunition. The European traders, also, uninfluenced by any sentiments but those of gain, not unfrequently assist them in their barbarous warfare, and help them, if not to devour their enemies, at least to provide the banquet. Hence deadly animosities naturally arise between the Europeans and some tribes of the natives; and while the Hunter lay at one of these islands, all the Europeans on shore, the majority of whom were profligate characters who had deserted from trading ships and settled there, were massacred and eaten by the Indians, with the exception of three: Martin Bushart, a Prussian, with his wife, a Feejee woman, and Achowlia, a Lascar, took refuge on board the Hunter, and begged to be put on shore at the first habitable island that should be met with. They were accordingly landed, with their consent, at *Tucopia* or Barwell Island, in lat. 12° 15′ S., long. 169°, at the south-eastern extremity of the Queen Charlotte Islands, where they were kindly received by the natives.

In May, 1826, captain Dillon, who had been an officer on board the Hunter during the voyage of that ship to the Feejee Islands, and who was one of the three Europeans that escaped from the hands of the islanders, returning from Valparaiso to Pondicherry in the St. Patrick, came in sight of the island of Tucopia: curiosity prompted him to enquire after his old acquaintances who had been put ashore there. As he approached the land, canoes came off to him with the Lascar and Martin Bushart. The gunner of the ship bought from the Lascar a silver sword guard; and, in answer to the en-

quiries made respecting the mode in which the islanders had procured it, Martin Bushart related that on his first arrival on the island he found there several iron bolts, axes, knives, tea cups, one silver spoon, and some other articles, all of French manufacture. When, in the course of a couple of years, he had acquired the language of the natives, he learned that no ship had been seen at the island previous to the Hunter, but that all those articles had been brought from Manicolo, a group of islands situated two days' sail in a canoe to the westward. Captain Dillon thought he could discern on the silver sword guard the initials of La Perouse's name; and prosecuting his enquiries among the natives, many of whom had visited the islands to windward, he heard from them that, many years before, two ships had been thrown away on the shores of Manicolo; that the crew of one had been all killed, while the people on the other got safe to shore, where they remained some time, until they built a small vessel with two masts from the wreck of the large one: the strangers then went away, leaving behind them, however, a few of their number, who proved very serviceable in warfare to the tribes with whom they were allied. The Lascar, who had visited Manicolo, had seen two of these Europeans, but he could not be induced to return again to that island. Martin Bushart, however, being weary of a savage life, was willing to accompany captain Dillon, and to assist him in his researches among the islands to windward; but when the ship had come within sight of Manicolo (the Recherche Island of D'Entrecasteaux,) the winds fell calm, provisions also began to fail; and, delay being particularly prejudicial to trading voyages, the captain was obliged to abandon his researches for the present, and to hasten his return to Pondicherry.

On his arrival in India, he lost no time in presenting a memorial to government, stating the clue which he thought he had discovered respecting the fate of La Perouse, and his own fitness, from long habits of intercourse with the islanders of the South Seas, to prosecute the en-

quiry; the result of which was not only interesting to mankind in general, but might redound also not a little to the honour of the government by whose liberality it was undertaken. This application immediately met with the attention it deserved. A ship, named the Research, was placed under the command of captain Dillon, who sailed on his voyage of investigation in January, 1827. He first touched at Tucopia, where he provided himself with a native pilot and interpreter, and then proceeded to Manicolo, which, after an accurate survey, he found to be almost entirely surrounded at a little distance by a reef of coral rocks, passable only at a few narrow openings. From the natives, with whom he was able to establish a friendly correspondence, he learned that one of the ships had struck at a place called Whannow, and sunk in deep water, the other ran on the rocks near Paiou, and from her the strangers landed, and remained on the island five months, during which time they built themselves a small vessel. They pointed out the place where these operations had been carried on, and it seemed well adapted to the purpose. The natives denied that they had attacked and killed the crew of one of the ships; nor was captain Dillon able to find any confirmation of the report, which he had heard from the Tucopians, that the skulls of the shipwrecked strangers were preserved in a public building called the *spirit-house*: he is of opinion that the hostility of the islanders to the French, who it appears were obliged, while they remained on the island, to entrench themselves with wooden palisades, arose not from wanton barbarity, but from the belief that the strangers were preternatural beings, or spirits of the sea. That their habitual ferocity was irritated by superstition is rendered likely from the accounts which they give of the French, whom they describe as conversing with the sun and the stars by means of a long stick, thus obviously alluding to the business of the observatory. The cocked hats of the French perhaps misled them into the belief that their noses were a yard long. Their description of the sentinels was not less ludicrous; for they

represented them as men standing on one leg, and holding a bar of iron in their hands.

Captain Dillon applied himself with assiduity and success to collect the relics of the French. On examining the coral reef where the ship had struck, he discovered and raised several brass guns. From the natives he purchased some fragments of a theodolite, the backboard of a ship, ornamented with a fleur-de-lis; a ship's bell with the inscription *Baxin m'a fait;* a great quantity of iron in bars and bolts; some fragments of china; fragments of barometer tubes, and other articles. In April he returned to Calcutta.

When captain Dillon arrived in Paris, in February 1828, with the relics of the French expedition, he was graciously received by Charles X., who liberally recompensed his toils with a pension of 4000 francs. Count Lesseps, who had quitted the expedition of La Perouse at Kamtschatka, recognised the guns and the millstones as resembling those which were on board the French frigates; the carved backboard also he believed to have belonged to the Boussole; the armorial bearings, engraved on the bottom of a silver candlestick included among the relics, were at the same time recognised by the expert genealogist, sir William Betham, to be those of Colignon, who was botanist on board the same frigate. Thus it appears likely that the Boussole, with La Perouse himself, was thrown upon the ridge, while the Astrolabe and all her people sank in deep water: what became of the unfortunate commander, after he left Manicolo, it is impossible to conjecture. Of the two Frenchmen who had been seen on that island by the Lascar, one had died at an advanced age, about three years before captain Dillon's arrival there; the other had followed the fortunes of a chief with whom he was allied, and who, being worsted by his enemies, had retired to some of the neighbouring islands.

CHAP. VIII.

EUROPEANS IN THE SOUTH SEA.

ARRIVAL OF THE PENRHYN AT OTAHEITE. — CAPTAIN WATTS PRETENDS THAT COOK STILL LIVES. — VOYAGE OF CAPTAIN BLIGH. HIS STAY AT OTAHEITE. — MUTINEERS SEIZE THE BOUNTY. — SURPRISING VOYAGE OF BLIGH IN AN OPEN BOAT. — THE MUTINEERS SAIL TO OTAHEITE. — CARRY OFF THE LIVE STOCK. — PROCEED TO TOOBOOAI. — OBLIGED TO RETURN. — THE BOUNTY SAILS FROM OTAHEITE BY NIGHT. — IS HEARD OF NO MORE. — THE MUTINEERS SEIZED. — THE PANDORA WRECKED. — BLIGH'S SECOND VOYAGE. — HETE-HETE ACCOMPANIES HIM TO THE WEST INDIES. — THE POSTERITY OF THE MUTINEERS FOUND ON PITCAIRN'S ISLAND. — DESCRIPTION OF THE PEOPLE. — HISTORY OF THEIR SETTLEMENT. — THE ANTELOPE WRECKED AT THE PELEW ISLANDS. — PRINCE LEE BOO VISITS ENGLAND. — CHANGES EFFECTED IN THE SOUTH SEA ISLANDS. — INCREASED VALUE OF IRON. — OLD ARTS FORGOTTEN. — INFLUENCE OF EUROPEAN TRADERS. — REVOLUTION IN THE SANDWICH ISLANDS. — THE MISSIONARIES. — THE ART OF PRINTING INTRODUCED INTO OTAHEITE. — INDUSTRY OF THE NEW ZEALANDERS. — CHRISTIANITY EMBRACED BY THE FRIENDLY ISLANDERS.

THOUGH Cook was not the first navigator who visited the South Sea, yet, by the combined merit of his discoveries, and of his skill in preserving the health of his crew in long voyages, he may be said to have been the first who traced a permanent path across the great ocean, and laid it completely open to the enterprise of Europeans. The fur trade on the north-west coast of America, to which he guided the hardy enterprise of British merchants; the colony in New South Wales, which also originated in his discoveries; and the success with which he wintered and provisioned his ships among the numerous islands of the great ocean; were all so many causes which led to a frequent and active intercourse between Europeans and the islanders of the South Sea. The fur trade started up with vigour immediately

on the return of his ships from the last expedition; but the active tide of commerce originating in this impulse ran at first to the northward of the line, so as to embrace only the Sandwich Islands in its scope.

It was not till eleven years had elapsed after Cook's last visit to Otaheite, that a European ship again touched at that island. In 1788, the Penrhyn, commanded by lieutenant Watts, on her voyage from Port Jackson to China, being in great want of water and provisions, ran far to the east and made the island of Otaheite. The natives were so earnest in their enquiries respecting captain Cook, that lieutenant Watts, fearful lest he should lose his influence with them if he revealed the truth, pretended that Cook was still alive and returning to visit his Indian friends. A portrait of himself, which that great navigator had left with the king of the island as a token of his esteem, was brought on board the Penrhyn to be repaired. Notwithstanding the charge of levity brought against the islanders of the South Sea, and particularly the inhabitants of Otaheite, their attachment to those who first made them acquainted with the arts of civilisation appears to have been unalterably sincere.

Not long after the departure of the Penrhyn from Otaheite, captain Bligh arrived there in the Bounty. He had been sent to the South Sea for the purpose of collecting plants of the bread-fruit tree, and other valuable vegetable productions, to be afterwards transplanted to our colonies in the West Indies. He helped to confirm the natives in the delusive belief that captain Cook was still living. He experienced from them all the kind treatment that the dissensions of the island would allow; Pomare the king, and his queen Iddea, entreated him to carry them to Britain. Having remained eight months in Matavai Bay, and taken on board above 1000 plants of the artocarpus, or bread-fruit tree, captain Bligh left the island to return home: but his crew were become corrupted by the life of indolence and enjoyment which they had led here. The superiority which they possessed over the islanders, and the homage they received

from them, intoxicated their minds, and allowed them to see only the alluring side of a semi-barbarous life. They formed a plan of mutiny, which they put in execution when the ship was leaving the Friendly Islands; and captain Bligh, being seized by the mutineers, was forced into an open boat with his officers and a few of his men, in all sixteen persons; and, with a compass and small stock of provisions, was turned adrift, and left to make his way homewards. The mutineers in the Bounty, under the command of Fletcher Christian, then put the ship about, and giving three cheers for Otaheite, soon disappeared. This occurred not far from the island of Toofooa, on which Bligh landed, in hopes of obtaining a stock of water; but the islanders, perceiving his weakness, were disposed to detain him and his companions, and with difficulty he effected his escape. After a most surprising voyage, he reached the Dutch settlement at Timor, having passed Torres's Strait by a channel different from that explored by Cook, and having made such observations in his passage, notwithstanding his want of instruments, as to render considerable service to geography.

In the mean time the mutineers in the Bounty, under the command of Fletcher Christian, one of the mates, directed their course to Otaheite; but not thinking it prudent to remain on an island where detection and punishment would be so likely to follow their offence, Christian steered for Toobooai, an island discovered by Cook in his second voyage, about 100 leagues to the south of Otaheite; but the want of animals on that island forming a great objection to their residing on it, the mutineers returned to Otaheite, where Christian told the natives that he had met captain Cook, who commanded him to get all the live stock possible, to make a settlement on an island not far to the west. The islanders, overjoyed at this intelligence, and anxious to evince their zeal for the great man whose presence they shortly expected, vied with each other in executing the commands of Christian; and in a few days he was able to set sail

for Toobooai, having on board 460 hogs and 50 goats, besides a plentiful supply of dogs, cats, and poultry. The bull and cow left on the island by captain Bligh were also taken away, but the former soon after died of the injuries he received. Several Otaheitean women, and a still greater number of men, who had concealed themselves in the ship, accompanied the mutineers. Among these emigrants was Oedidee, or more properly Hetehete, the native of Borabora, who had accompanied captain Cook during a part of his second voyage. But at Toobooai the mutineers could not agree with the native inhabitants, whose continual hostilities rendered their abode there so uncomfortable, that in 1789 they quitted it for the third and last time. As soon as the Bounty anchored in Matavai Bay, some of the natives, and sixteen of the mutineers, went on shore. Those who remained on board cut their cable in the night and put to sea, and no account was heard of them for many years: thirty-five islanders, men, women, and children, went with them.

The Englishmen who remained at Otaheite, and who had been seduced into crimes by the hope of a life of ease and pleasure, were now obliged to exert themselves, to avert the consequences of their helpless situation. They succeeded in building a schooner of forty tons; and astonished the natives not so much by their skill as by their industry and perseverance. The example of their boldness and vigour must have excited an important influence on the simple natives; and their intrinsic superiority would probably in a short time have rendered them practically masters of the island. One of them, named Churchill, actually became sovereign of Waheadoa, the smaller peninsula, by right of succession to his *tiyo*, or friend, the former king. The natives seemed to have been proud of their foreign chief; for when he was murdered by an envious comrade, they avenged his death by burying the assassin under a shower of stones.

In 1791, the Pandora frigate, captain Edwards, ar-

rived at Otaheite, having been sent by the British government to apprehend the mutineers. All of these who remained on the island, fourteen in number, were taken on board, to the inexpressible grief of the islanders. The Pandora was wrecked on her passage home, in Endeavour Straits, and four of the mutineers were among the number of those who perished on that occasion. Of the ten who arrived in England, only three suffered sentence of death.

No tidings, in the mean time, could be met with respecting Christian and the seven mutineers who had sailed with him in the Bounty; and twenty years passed over before any clue was found to the mystery of his fate. At length, in 1808, captain Folgar, commanding an American trader, touched at Pitcairn's Island to complete his cargo of seal skins. He supposed that the island was uninhabited, but, to his surprise, three young men, who spoke English well, came off to the ship in a double canoe, with a present of fruit and a hog. They said that their father was an Englishman, who had sailed with captain Bligh; and captain Folgar, on landing, saw an Englishman, named Alexander Smith, who had been one of the crew. He was the only one of the mutineers who remained alive, the rest having been murdered by the Otaheitean men, who were immediately after sacrificed to the vengeance of the widows.

Smith appears to have been uneasy at the discovery made of his retreat, for in all subsequent accounts he appears under a changed name. In 1814, captain Staines fell in with Pitcairn's Island, and found, to his astonishment, that all the inhabitants, forty-six in number, spoke good English. A venerable old man, named John Adams, was the patriarch of the community, or rather family, in which no germs of discord or vice had yet found place. The eldest born on the island was the son of Christian, and was baptized Thursday October Christian. Old Smith, or Adams, was at first much alarmed lest the English were coming to apprehend him; but this fear once dispelled, he and his people expressed the most

extravagant joy at the sight of those whom they were pleased to call countrymen.

The young natives of Pitcairn's or Christian's Island are beautifully formed, uniting the vigour so common among the islanders of the South Seas with features decidedly English. The women, in particular, are remarkable for their majestic carriage and matchless symmetry: they are, at the same time, modest, innocent, and cheerful. The houses on the island are well built, and neatly furnished with beds and bedsteads. A supply of instruments, such as spades, hatchets, &c. was made from the iron in the Bounty, which was broke up for that purpose. The ground was cultivated by both sexes; the first colonists availing themselves of European seeds, as well as of the native productions of the South Sea. Old Adams kept a journal, in which he entered minutely the quantity of work done by each individual: and besides private property, there seemed to be a general stock; or, perhaps, it may rather be concluded, that in the infancy of society the whole community feels a nearer interest in the industry and welfare of each of its members.

Some further particulars relating to this interesting community were learned in 1819, from an Otaheitean woman, who visited New South Wales. She was the wife of Isaac Madden, one of the mutineers, but had at first fallen to the lot of Smith, by whom she was married, or tattooed, on the left arm, with the initials of his name and date, "A. S. 1789." According to her account, Neddy Young, another mutineer, discovered the art of distilling spirits from the tee root; hence the jealousy and quarrels, which terminated in the death of all the Europeans except Smith, who saved his life by crawling into a wood when desperately wounded. The very night after this massacre took place, the Otaheitean widows avenged the murder of their husbands by putting all their countrymen to death. Thus Smith remained the only male on the island, with the exception of some young children. There was, however, no child of unmixed

Otaheitean race after this calamity. The still was given to the first American ship that touched at the island, in exchange for a boat, which proved a very valuable acquisition. In 1822, a whaler which touched at Pitcairn's Island, found that its population had increased to seven families, consisting of fifty-three persons. Adams and six Otaheitean women were all that remained of the original settlers. There were eleven active, vigorous young men, able and willing to assist a ship in obtaining a supply of wood and water. They were observed to be very exact in their religious observances, and to fast rigidly on Friday. The children also wore crosses on their necks; but though resembling the other South Sea islanders in the simplicity of their lives, the natives of Pitcairn's Island are quite exempt from the vices of the barbarous state, and are perhaps destined to exert one day an influence on the scattered inhabitants of Polynesia proportioned to their physical perfection and their aptitude to learn.

Bligh returned to the South Seas in 1792, and succeeded in effecting the object of his mission; he carried a large stock of plants of the bread-fruit tree to the West Indian Islands, and persuaded Hete-hete, the native of the Society Islands who had accompanied Cook during part of his second voyage, to go with him to the West Indies to take care of the young plants.

The Pelew Islands, which are situated between the Carolines and Philippine Islands, were long known to the Spanish navigators, who in their voyages to America from Manilla could distinguish them from a distance; but owing to the supineness or reserve of the Spaniards, very little information was possessed respecting these islands until 1783, when the East India ship, the Antelope, captain Wilson, was wrecked on a reef of coral rocks on the western side of the group. The shipwrecked mariners were treated with cordial hospitality by Abba Thulle, the king of the island, and having built a small vessel, returned to England, accompanied by prince Lee Boo, the son of their hospitable entertainer.

The prince died five months after his arrival in London, having become an object of general affection by his docility and the nobleness of his disposition. In 1790, the East India company sent two ships from Bombay to convey to Abba Thulle the melancholy tidings of his son's death. The English were received by the kind-hearted people and their venerable chief with the sincerest affection. This intercourse between the Pelew islanders and the British was productive of a great increase of natural wealth to the former. The East India company sent them as a present, kine, sheep, fowls of various kinds, corn, and seeds of culinary vegetables; and in 1798, when these islands were visited by another English vessel, tame cattle were found to have multiplied exceedingly, and the newly introduced vegetables were in abundance.

No discoveries of striking importance have been made in the South Sea since the days of Cook: many islands, indeed, have been visited which were before unknown, but these form unimportant additions to the great members of the Polynesian family with which we are already familiar. There are probably many islands in the great ocean which have hitherto escaped our researches; but the interest of discovery in that quarter is greatly diminished by the multitude of islands with which we are already acquainted.

The circumstances of the South Sea Islands, social, moral, and political, have undergone important changes within the last half century. The visits of Europeans have effected a greater revolution in the manners of those children of nature than could have been expected in so short a time. When Vancouver visited Otaheite (1791), he found that iron, notwithstanding the quantity gradually accumulating in the island from the repeated visits of English shipping, had risen considerably in value; and, in consequence, that provisions purchased with that useful metal were 200 per cent. cheaper than in the time of Cook. This he justly attributed to the increased estimation of iron, and not to any superabundance of the articles necessary for the sup-

port of life. Tools made of bone and of coral, with which the islanders used formerly to build their canoes, and execute workmanship that exhibited surprising patience and ingenuity, had fallen into total disuse, so that if the supply of iron were withdrawn, the islanders would necessarily retrograde in arts and civilisation. Their canoes had also declined, the people having become aware of their imperfection, without being capable of building any thing better. The cattle left on the island by Cook and others had not multiplied as might have been expected. The natives preferred the milk of the cocoa nut to that of the cow, and these useful animals were consequently neglected. Goats were too lean for their taste, and fell equally into contempt. Thus the wants of the islanders were seriously increased, while little was added to their resources; but a still more melancholy change was visible in the physical degeneracy of the people, resulting from diseases introduced by Europeans, and in the consequent depopulation of the island.

This dismal picture, however, was taken in one of those turbulent periods of transition which usually precede the revolutions by which human society makes a striking and permanent progress. Want and affliction among a people are the ordinary precursors of exertion and improvement. Within a very few years after Cook explored the Pacific Ocean, the Society and Friendly Islands were annually visited by Europeans, actuated in general by no other views but the sordid motives of gain. As often as the ships touching at the islands were deficient in their crews, they kidnapped and carried off the natives to complete their complement of men. These acts of violence led to retaliations, which were more easily provoked, as victory on the side of the islanders was accompanied with much more striking advantages. In many instances they succeeded in seizing small vessels, and in making themselves masters of European artillery. On Europeans themselves they set a high value; and although those who lingered in the

South Sea Islands, contented in some measure to relapse to savage life, were generally men of bad character, yet the natives regarded them with favour and indulgence, and allowed them all the privileges due to their practical superiority.

The European shipping in the South Sea is chiefly engaged in the whale fishery, in the fur trade, and in the trade for sandal wood and other tropical productions. The spermaceti whales have been already pursued round the globe, but there is no part of the ocean so remote as to afford them a shelter from the perseverance and cupidity of man. The visits of the whalers are chiefly confined to the islands of the Southern Pacific. The trade in sandal wood, which is carried on in the Feejee and Friendly Islands, is, from the nature of the shipping employed in it, perhaps, the most demoralising of all. Small colonial vessels, fitted out by needy adventurers, carry on a large portion of this commerce, unrestrained by any national or moral considerations.

The fur trade, carried on with the north-west coast of America, has effected a wonderful revolution in the Sandwich Islands, which from their situation offered an advantageous shelter for ships engaged in it. Among these islands the fur traders wintered, refitted their vessels, and repaired their stock of fresh provisions; and, as summer approached, returned to complete their cargo on the coast of America. Iron tools and, above all, guns were eagerly sought for by the islanders in exchange for their provisions; and the mercenary traders, regardless of consequences, readily gratified their desires. Fire-arms and ammunition being the most profitable stock to traffic with, were supplied them in abundance. Hence, the Sandwich islanders soon became formidable to their visitors; they seized on several small vessels, and displayed an energy tinctured at first with barbarity, but indicating great capabilities of social improvement. At this period, one of those extraordinary characters which seldom fail to come forth when fate is charged with great events, completed the revolution which had its

origin in the impulse of Europeans. Tame-tame-hah, a chief who had made himself conspicuous during the last and unfortunate visit of Cook to those islands, usurped the authority of king, subdued the neighbouring islands with an army of 16,000 men, and made his conquests subservient to his grand schemes of improvement. He knew the superiority of Europeans, and was proud to imitate them. Already, in 1796, when captain Broughton visited those islands, the usurper sent to ask him whether he should salute him with great guns. He always kept Englishmen about him as ministers and advisers. In 1817 he is said to have had an army of 7000 men, armed with muskets, among whom were at least fifty Europeans. Tame-tame-hah, who began his career in blood and usurpation, lived to gain the sincere love and admiration of his subjects, who regarded him as more than human, and mourned his death with tears of warmer affection than often bedew the ashes of royalty.

In the Sandwich and Society Islands, British influence may be considered as predominant, and indeed the maritime superiority of England has raised her to importance in every part of the Pacific Ocean. The English do not, however, claim a right to any of the islands which they frequent. The sovereignty of the Sandwich Islands, formally ceded to Vancouver for the king of Great Britain, being justly regarded as an honorary title, the literal interpretation of which it would be impossible to enforce.

Still greater revolutions are likely to be effected by the introduction of Christianity among the South Sea islanders. Missionaries took up their residence in Otaheite in 1799, and remained there for ten years, without, however, making any converts, and unhappily without gaining even the estimation of the people. In the commotions which then took place in the island, they were obliged to seek an asylum in Eimeo and the other Society Islands, where their efforts were attended with rather more success. At length, in 1817, Pomare, the king of Otaheite, being disposed to embrace Christianity,

the missionaries were invited to return to that island. A piece of ground, or small domain, was ceded to them in Matavai Bay, and they were treated with the general respect which might be expected to follow royal protection. The missionaries, on this occasion, brought a horse as a present to the king; most of the natives had heard of a horse which Cook had formerly landed on the island, but few were old enough to recollect it. Nothing could exceed their delight on this occasion, when they saw the animal galloping on the beach, with the captain on his back. They called him *Buaa-horo-fenua*, and *Buaa-afai-taata*, or land-running pig, and man-carrying pig.*

The missionaries had brought with them a printing-press, and having prepared immediately on their arrival to print the Gospel of St. Luke in the native language, the first sheets of the work were struck off by the king himself, on the 13th of June, 1817. When the king entered the dwelling of the missionaries for this purpose, the door was closed, and the window darkened, that he might not be overlooked by the crowds of natives on the outside, who were assembled as if in expectation of some great event. He examined the preparation with great care before he proceeded to work. As soon as the paper was removed from beneath the press, and the covering lifted up, the chiefs and attendants rushed towards it, to see what effect the king's pressure had produced; when they beheld the letters black, large, and well defined, there was a simultaneous expression of delight and wonder. In like manner, when the first sheet was shown to the crowd without, they raised a general shout of astonishment and joy. From the docility of the people of Otaheite, and their anxiety to learn, it is probable that the art of printing, now introduced among them, will produce all the effects that the most sanguine expectations can anticipate. Native teachers are now rapidly dispersing themselves among the other islands of the South Sea; and, from their superior eloquence in

* Ellis's Polynesian Researches, vol. i.

their own tongue, it is reasonable to expect more decisive results from their efforts than from those of European missionaries.

In 1814, a mission was established at Wangeroa, in New Zealand. The dissensions of the native chiefs, the violence and fearful barbarity of the people, seem to oppose insuperable obstacles to the propagation of Christian doctrines. The missionaries had to endure and to witness the most revolting atrocities, and were even compelled to retire for a short time from the island; but they have since returned in greater numbers, and their efforts are beginning to be flattered with the dawn of success. The New Zealanders, who are a people of great natural energy, and of generous but of fierce dispositions, will probably make their first progress towards social improvement, by mixing with civilised people in their active occupations. They maintain a brisk intercourse with the British settlements in New South Wales, and the colonial shipping is in a great measure manned by them. The colonists, on the other hand, resort much to New Zealand for naval timber and the flax plant, and large vessels of 300 tons have been already built by them on that island.

Christianity has been a long time established in the Sandwich Islands, and has been mainly conducive to the rapid strides of civilisation made by the inhabitants of that group. In the island of Hevaee, also, one of the most important of the Friendly Islands, it was adopted, in 1830, by the king, under whose protection a body of missionaries established themselves on the island. Thus it is probable, that ere long the propagation of a purer religion will wholly extirpate the frivolous and cruel superstitions which contribute not a little to impede the progress of civilisation among the South Sea islanders; and will serve as a new tie to connect them to the most active and enlightened portion of mankind.

CHAP. IX.

THE COASTS OF AUSTRALIA.

UNKNOWN COASTS OF NEW HOLLAND. — ESTABLISHMENT OF A COLONY AT PORT JACKSON. — COAL DISCOVERED ON THE COAST. — VOYAGES OF BASS AND FLINDERS IN A SMALL BOAT. — BASS PROCEEDS TO THE SOUTH. — DISCOVERS PORT WESTERN. — FLINDERS VISITS THE FURNEAUX ISLANDS. — FLINDERS AND BASS DISCOVER PORT DALRYMPLE. — CIRCUMNAVIGATE VAN DIEMEN'S LAND. — BASS'S STRAITS. — FLINDERS APPOINTED TO SURVEY THE COASTS OF NEW HOLLAND. — HE EXAMINES THE SOUTHERN COAST. — SPENCER'S GULF. — PORT PHILIP. — EXAMINATION OF THE EASTERN COAST. — FLINDERS PASSES TORRES STRAITS. — SURVEYS THE GULF OF CARPENTARIA. — MEETS A FLEET OF MALAYS. — REPAIRS TO TIMOR. — RETURNS TO PORT JACKSON. — SAILS IN THE LADY NELSON. — THE CATO AND LADY NELSON WRECKED. — THE CREWS SAVED. — FLINDERS GOES TO PORT JACKSON IN AN OPEN BOAT. — RETURNS AND RESCUES THE CREWS. — SETS SAIL FOR ENGLAND IN A SMALL SCHOONER. — TOUCHES AT MAURITIUS, AND IS DETAINED AS A PRISONER. — EXPEDITION OF BAUDIN. — THE FRENCH MEET FLINDERS. — EXPLORE THE SWAN RIVER. — SHARKS' BAY. — THEIR ENCOMIUMS ON THE COLONY AT PORT JACKSON.

THE first voyage of Cook had completed the general survey of the Australian continent, and fixed a limit to its extension towards the east; but still its coasts remained to be accurately examined, and many parts were still wholly unknown. It was traditionally recollected that the Spanish navigator, Torres, had sailed to the south of New Guinea; but his voyage met with little attention or credit till 1762, when, on the taking of Manilla, a manuscript journal of his voyage was discovered, which gave authenticity to the almost forgotten rumours of his discoveries. Still Cook seems to have doubted the existence of a strait between New Guinea and Terra Australis; and when he sailed between them in 1770, his achievement had the brilliancy of a new discovery.

The Dutch navigators had coasted the northern shores at a very early period, and Tasman is supposed to have completed the survey of that part of the continent; but as the jealous policy of the Dutch government suppressed the publication of these voyages, other nations remained incredulous as to the reality of discoveries which were in some measure concealed from them. The Dutch themselves, it appears, had never solved to their own satisfaction the most important questions respecting the great Australian land, as they still remained ignorant of a great portion of the eastern and western coasts. They thought it probable that the lands discovered on the north and on the south were separated from each other by a great strait running from east to west. The first voyage of Cook, by establishing the continuity of the eastern coast, overturned this hypothesis. The vagueness and uncertainty, however, which hung over the ancient surveys of the Gulf of Carpentaria, and the total ignorance of a large portion of the southern coast, still left ample space for the indulgence of theories. It was now, therefore, assumed, that Terra Australis was divided into two great islands by a strait running from north to south. The time, however, was arrived, when the activity and intelligence of Europeans were about to be transplanted to those distant shores, and when the civilised world was to become accurately acquainted with a fifth quarter of the globe.

The favourable report which captain Cook had made of the harbour and country in the neighbourhood of Botany Bay, with the commercial advantages likely to be developed from the proximity of New Zealand, had made a due impression on the British government; and, in 1788, captain Philip sailed with a large convoy to establish a colony in Botany Bay. It was soon found that Port Jackson, a few miles to the north, offered a far more advantageous situation for the new settlement, which was accordingly removed thither. The colony, although composed in a great measure of convicts, rose at once into prosperity; and the knowledge of the ex-

tensive country in which they were settled gradually extended, by a succession of those accidents which must take place wherever there exists the spirit of mercantile enterprise.

Seven years after the establishment of the colony, captain Hunter was appointed its governor; and in one of the ships which accompanied him to New South Wales were two young men, Messrs. Flinders and Bass, the former a midshipman, the latter a surgeon in the navy, both enthusiastically bent on exploring unknown countries. In preparing an expedition, however, for this purpose, they were left wholly to their own resources, and were unable to provide themselves with any better vessel than a little boat eight feet long, to which they gave the name of Tom Thumb. In this our bold adventurers embarked, with only a boy to assist them. Directing their course to the south, they examined minutely every little cove along the shore, and explored George's River about twenty miles beyond the extension of the government survey: the report which they made of the country led to the establishment of a colony on the banks of this river. In the following year, 1796, they again put to sea in Tom Thumb; and after encountering numberless difficulties and dangers, arising from the slenderness of their means and the frailness of their vessel, they returned with no result of their voyage but a minute practical acquaintance with a long line of coast. They had also given such proofs of courage, skill, and perseverance, as recommended them to be chosen as the instruments of important discoveries.

On the return from this second excursion they found at the colony Mr. Clark, the supercargo of an East Indiaman, which, having sprung a leak, was run on shore at Furneaux Islands. Mr. Clark and some of the crew put to sea in the long boat, in order to reach the English colony, and to procure assistance for their shipwrecked comrades; but the boat was thrown on shore and stove to pieces at Cape Howe, 300 miles from Port Jackson. Mr. Clark and his companions were thus

obliged to travel overland along the coast. In this perilous and fatiguing journey some of them perished of famine, others were cut off by the natives; so that of the whole number only three reached Port Jackson. They reported, that in the course of their march they had passed a great number of small rivers, fording some at their mouths, while they were obliged to ascend others some miles to gain a passage. In one place, while lighting a fire upon the beach, they accidentally discovered that the black stones strewed around them were coal. About the same time lieutenant Shortland, having gone northward in pursuit of some convicts that had escaped, discovered, in lat. 33°, a harbour, which he named Port Hunter, round which the cliffs displayed a stratum of fine coal, so close to the water that vessels could load from it without difficulty. A settlement called Newcastle was soon after formed here. In the same year Mr. Flinders made an excursion to Furneaux Islands, and brought back such an account of the number of seals that frequented that group, as rendered them at once an object of commercial speculation. All these accidental discoveries were so many incitements to awaken the energy and call forth the exertions of the young colony.

Messrs. Flinders and Bass had now become distinguished for their zeal and enterprise; and, as the prospects of the colony began to enlarge, the government felt a greater interest in the prosecution of distant researches, and gladly availed itself of the zeal which lay within its reach. In December, 1797, while Mr. Flinders was employed on a voyage to Norfolk Island, Mr. Bass was provided with a fine whale-boat and a crew of six men to proceed on a voyage of discovery to the south. On approaching one of the small islands which lie at the south-eastern angle of New South Wales, he was surprised to find on it signs of inhabitants; and still greater was his surprise, to find that its occupants were seven convicts, who, having escaped from Port Jackson in a boat, had run ashore here, and had for some time supported a miserable existence on seals, shell-fish, and

petrels. Thus we find that Europeans no sooner reached the South Seas and the Australian countries, than they found means by their ingenuity and audacity to penetrate into the most sequestered portions of them. The chief object of Mr. Bass's voyage was to ascertain whether there did not exist an open strait between New Holland and Van Diemen's Land. Cook and other navigators had given it as their opinions that these countries were connected; and the popular voice was supposed of course to assent to these eminent authorities: yet the question was by no means decided; and Mr. Bass experienced not a little joy on finding that the coast of New Holland began to turn towards the north and west, and offered evidence of being exposed to the billows of the great ocean. He continued this new course till he arrived at a capacious harbour, which, from its relative situation, he named Port Western: his provisions were now consumed, and, notwithstanding his strong desire to make an accurate survey of his new discoveries, he felt himself obliged to return. He had taken out provisions for only six weeks, yet, by replenishing his stock with fish and sea fowls which he found in great abundance, he contrived to protract his voyage to the eleventh week, besides bringing home with him two of the convicts whom he had discovered. This voyage of 600 miles in an open boat is one of the most remarkable on record: it was undertaken not through necessity, but with the deliberate intention of exploring unknown and dangerous shores; it enriched geography with a knowledge of 300 miles of coast, and ascertained that the shores of New Holland, instead of running towards Van Diemen's Land, took an opposite direction, and had all the appearance of being exposed to an open sea. So highly did the colonists appreciate the merit of Mr. Bass's discoveries, that the boat in which he made this voyage was long preserved as a curiosity; and snuff-boxes, or other toys, made of its keel, were considered as peculiarly valuable.

In order to prove that Van Diemen's Land was se-

parated from the Australian continent by the strait, nothing now remained but to circumnavigate the former: all conjectures were in favour of the supposition.

Mr. Bass returned from his voyage in February, 1798, and, in October of the same year, he accompanied Mr. Flinders in a small schooner of twenty-five tons to complete this important discovery. As they proceeded along the northern shore of Van Diemen's Land, they discovered a wide inlet, which appeared to branch off into several great rivers; one of these branches was explored to a considerable distance, and found to bear a resemblance to a chain of lakes, into which descended several streams from the distant mountains. The shores were fertile and well wooded, and our hardy voyagers found an abundant supply in the multitude of black swans that covered the stream. This opening was named Port Dalrymple; and, five years later, when a colony was established here by colonel Patterson, the great western branch was called the Tamar, and its chief auxiliary streams received the names of the North and South Esks.

After devoting some time to this interesting discovery, our voyagers proceeded to the west; and at length, with a mixture of joy and alarm, doubled the north-west cape of Van Diemen's Land, and discerned the coast trending to the south. They were gratified in thus solving a geographical problem which had baffled so many eminent navigators, while at the same time they felt not a little trepidation when their little bark became at once exposed to the great swell of the Southern Ocean: they had the good fortune, however, to escape the dangers which continually threatened them in their voyage to the south. On reaching the south-eastern shore they proceeded to ascend the River Derwent, which had been discovered by D'Entrecasteaux, who named it *Rivière du Nord*. The country around this fine river was found to be generally fertile, and abounding with good timber. The description which Mr. Bass gave of it on his return was so flattering, as to give rise to the establishment of a colony there in 1803. Our voyagers soon after returned

triumphantly to Port Jackson, having now established the insularity of Van Diemen's Land, and made such discoveries, as to its harbours and rivers, as were of the utmost importance to schemes of colonisation. The strait through which they effected their passage was named from the person who had first ventured to explore it, *Bass's Strait.*

In the following year Mr. Flinders was employed to survey Harvey and Glass-House Bays to the north of Port Jackson; and, on his return to England immediately after, he met with the reward due to his zeal and ability: he was promoted to the rank of lieutenant, and appointed to command the Investigator, a ship fitted out for discoveries on the Australian shores. He was instructed to examine the southern coast, a large portion of which had not yet been seen by any European; he was then to proceed to the north-west coast, where, according to Dampier's description, the great height of the tides rendered it likely that deep inlets and good harbours might be found. The Gulf of Carpentaria was next to be surveyed, with the important but nearly inaccessible channels of Torres' Strait.

He arrived at Point Leuwin, the south-western extremity of Australia, in the beginning of December, 1801, and reposed a little after his voyage in King George the Third's Harbour, discovered by Vancouver. The plan of the sound, constructed by that skilful navigator, was found to be perfectly correct. Mr. Flinders, and the gentlemen with him, attempted to explore the country inland, but were stopped in their progress by a chain of marshes extending from east to west. Few interesting objects presented themselves during their voyage to the westward, along what is called Nuyts' or Nuitz' Land. This coast had been previously surveyed by admiral d'Entrecasteaux, and it only remained to fill up the occasional omissions of his charts. From King George the Third's Sound to Cape Pasley, a distance of 800 miles, the shore is low, sandy, and monotonous; but, beyond Cape Pasley, cliffs rise from the height of from 400 to 600 feet, and extend,

with little variety of appearance, for a length of nearly 450 miles. This uniform barrier, of such extraordinary length, gave rise to some ingenious theories on the part of our navigators: it was conjectured by them to be the outer edge of a reef of coral, raised, by some grand convulsion of nature, to its present elevation. They were unable to approach it near enough to ascertain its nature, but it appeared to be calcareous. The country behind it was completely concealed from view.

At length Mr. Flinders, in his progress eastward, arrived at that part of the coast which was still wholly unknown, and doubled a great headland beyond which the shores inclined towards the north. This was an interesting discovery, and for some time our navigators indulged in the hope that they had found the great strait which communicated with the Gulf of Carpentaria. This headland was named *Cape Catastrophe*, from a melancholy accident which occurred near it:—a boat being upset in the rippling current at its base, and Mr. Thistle, the master, with some of the men, being drowned. As the ship proceeded northward our voyagers soon discerned that they were entering a deep gulf, the termination of which was visible in the lofty mountains towards the north. One of the highest of these mountains received the name of *Mount Brown* from the naturalist of the expedition, who, notwithstanding all the difficulties that beset his path, had the perseverance to ascend it. The view from the top of Mount Brown was very extensive, its elevation being not less than 3000 feet; but neither rivers or lakes could be perceived, nor any thing of the sea to the south-eastward. In almost every direction the eye traversed over an uninteresting, flat, and woody country; the only exceptions being the ridge of mountains running to the north, and the water of the gulf to the south-westward. This great inlet, which was named, from the first lord of the admiralty, *Spencer's Gulf*, was found to be about forty eight miles wide at its mouth, and about 183 miles in depth, measuring from Gambier's Island, which stands

near the entrance. In sailing out of it toward the south east, our voyagers held their course between the main land and a large island which received the name of *Kangaroo Island*, from the great number of those animals which was seen sporting in every open spot. The soil seemed rich, and the aspect of the country was inviting. Opposite to Kangaroo Island was another gulf, about ninety miles in depth, which was named *St. Vincent's Gulf*.

Shortly after he had made these interesting discoveries, Mr. Flinders met the Geographe, a French ship, commanded by captain Baudin, despatched for the purpose of exploring the coasts of Australia. The meeting took place in Encounter Bay, in long. 138° 58′ east, and lat. 35° 40′ south, which is consequently the limit of discoveries on this coast made by the respective commanders. The next object which attracted the attention of Mr. Flinders was a fine harbour which he discovered near the western entrance of Bass's Strait, capacious enough for the largest fleet, and surrounded by a beautiful and apparently fertile country. He at first supposed it to be Port Western, discovered by Mr. Bass; but on detecting his mistake, (for Port Western was visible to the south east from the hills round the shore,) he gave it the name of *Port Philip*. An attempt was made to fix a colony here in 1803; but from the difficulty of obtaining a sufficient supply of fresh water, or from other causes, the project was abandoned, and the settlers removed to Van Diemen's Land. From Port Philip Mr. Flinders proceeded to Port Jackson to rest his crew and prepare for a second voyage.

In July, 1802, our indefatigable navigator again put to sea, and proceeded towards the north; having escaped the dangers of the eastern shore, he passed through Torres' Strait in three days. Bligh and Portlock, who explored the strait in 1792, had made the passage in nineteen days, while the Chesterfield and another ship, in 1798, had employed ten weeks in the same route. Though Mr. Flinders was purposely hasty, and omitted

all examinations which might retard his course, yet it is obvious that he ascertained a channel by which vessels following his guidance might pass expeditiously through that intricate strait. His voyage along the eastern shores of the great Gulf of Carpentaria offers little to interest. For 190 leagues the land is so low that the highest hill scarcely attained the elevation of the ship's topmast: among the Wellesley Islands, at the bottom of the gulf, was found a good road for shipping, and abundance of provisions. The western shores displayed greater variety of surface and luxuriance of vegetation; the cabbage palm was abundant; a tree resembling the true sandal wood was found there; and nutmegs, probably of inferior quality, were also met with. Traces of strangers were seen, which excited still greater attention; such as the remains of houses, with bamboo partitions; remnants of blue cotton cloth, &c.; and it was evident that the trees along the shore had been felled with axes: from all these circumstances it was conjectured the visiters to this part of the Australian continent were Asiatics. The natives also, who attacked our navigators with great animosity and courage, were evidently in the habit of waging hostilities with strangers, whom they regarded with more hatred than fear.

No less than 105 days were employed in exploring the Gulf of Carpentaria, the circuit of which, including the windings of the shore, is little less than 400 leagues. The form given to it in old maps is not very erroneous, and it is therefore evidently the result of real examinations; but as the authenticity of the Dutch voyagers was unsupported by the appearance of original documents, they fell into disrepute; and the Gulf of Carpentaria began to be considered a sort of fairy land, the product of fancy or imagination.

The Investigator had hardly left Melville Bay, a good harbour in the north-western extremity of the gulf, when those Asiatics were discovered whose traces had been seen for so many miles. They were Malays, to the number of 200, in six proas, from Macassar; and were

part of a fleet of sixty vessels employed on this coast in fishing for the trepang or sea-slug, which is considered a great luxury, and bought at a high price by the Chinese.

In this voyage, about 600 leagues of coast had been examined, but the crew of the Investigator being unhealthy, and the ship so unsound as to be hardly seaworthy, Mr. Flinders was obliged to abandon his survey at Wessels Islands and to proceed for provisions to Timor, whence he returned to Port Jackson in June 1803. His ship being examined, was found to be so much decayed as to be not worth repairing, and he was consequently obliged to return to England to solicit another ship. Embarking therefore in the Porpoise, a small colonial brig, he sailed in company with the Cato and Bridgewater, two large vessels which he engaged to pilot through Torres' Strait. It was his intention to complete his survey of the northern coast in the Porpoise, and then to proceed to England; but, mortified as he was at the unsoundness of the Investigator, and consequent loss of the ship, severer trials now awaited him. The whole eastern coast of New Holland is lined, as has been before observed, by a barrier of coral reefs, on which the sea breaks with dreadful violence; within them the water is smooth, but the navigation is rendered so difficult by the number of islands and shoals, of which the situation is not ascertained, that seamen generally prefer the visible dangers of the open ocean to those which lie concealed near the land. Mr. Flinders sailed without the reefs, not suspecting any danger, when suddenly, towards the close of day, the Porpoise struck on a shoal. Signals were immediately made to the Cato and Bridgewater to avoid the danger; the latter escaped, but the Cato struck on a rock, and immediately fell over; the Porpoise in the mean time filled with water, and it was feared, that if she were heaved across the reef she might sink at once. Mr. Flinders manned a boat, with the intention of reaching the Bridgewater, and concerting measures with the commander of that vessel to save the

sufferers from the wrecks; but the night was so dark, and the sea so boisterous that he found it utterly impossible to effect his purpose: it was with some difficulty even he returned to the wreck where his companions had given him up for lost. As day broke, they were made fully acquainted with the miseries of their situation; the bows of the Cato were above water, the rest completely sunk. The Porpoise was firmly fixed on the coral rocks, from which it would have been fatal to disengage her. The Bridgewater was out of sight; the commander of that ship manifesting the most culpable and heartless indifference to the sufferings of his companions. Fortunately, a dry sand-bank was visible at the distance of half a mile, large enough to contain the crews of the two ships with their provisions, which were luckily saved; tents were erected on it, their flags hoisted, the carpenters set to work to build boats, and this dreary little spot in the midst of the ocean witnessed the order and industry of a civilised community. It was now resolved that Mr. Flinders should go in the cutter to port Jackson to procure assistance for the shipwrecked people; and that if he did not return before the expiration of three months that they should embark in boats constructed from the timbers of the wrecks. He embarked accordingly on his perilous expedition, for such, unquestionably, must be deemed a voyage of 250 leagues in an open boat, along a coast inhabited by ferocious savages. In thirteen days he arrived at Port Jackson, where he was hardly recognised by governor King, so much had fatigue and anxiety altered his appearance. No time was lost in preparing to relieve the sufferers from the reef. He departed in a few days in the ship Rolla and two schooners; in one of which, named the Cumberland, of 29 tons, he determined to proceed himself to England, from Torres' Strait, preferring to encounter the dangers of such a voyage to the mortification of leaving unfinished the survey on which he had set his heart. Only six weeks had elapsed from the time when he left the bank to that of his return. Nothing could equal the exult-

ation of those who remained so long in this forlorn situation, when they perceived on the horizon the masts of ships advancing to their relief: their commander was greeted on his arrival by a salute of eleven guns and three cheers.

Flinders, always intent on the prosecution of his survey, and consequently on his voyage to England, soon put to sea in a little schooner, the Cumberland, with a crew of ten men; passing through Torres' Strait he reached Coepang in Timor in forty-eight days, being less than half the time employed by the Bridgewater in sailing to Batavia by the old passage, round New Guinea: but his schooner was found to be a bad sea vessel; she leaked much, and the pumps were out of order, so that it seemed impossible for her to reach the Cape of Good Hope without undergoing repairs. No alternative remained therefore but to touch at the Mauritius. This necessity was the prelude to the greatest misfortune which had as yet befallen our adventurous commander. He had left England during the war, but had obtained a passport from the French government, in which his vessel, the Investigator, was described, and the object of his voyage were distinctly stated as the grounds of his protection; but he now arrived at a French colony in another ship, and it was, unfortunately, discovered from his papers, that he had been instructed by governor King to make himself acquainted with the tides, winds, produce, and circumstances of the island. The passport was thus infringed in spirit as well as letter. These irregularities might be excused, but could not be overlooked; and Mr. Flinders, in pleading his cause with general De Caen, the governor of the island, assumed a tone too lofty for one whose conduct stood in need of a gracious construction. The general himself appears to have been of an arrogant and tyrannical disposition; and, for some time, he treated the English commander with a needless severity. It was in 1803 that he was seized as prisoner of war, and he was not allowed to depart until 1810: an order for his liberation had

indeed arrived in the colony at the close of 1806; but general De Caen, under various pretences, delayed its execution. Mr. Flinders is said in the mean time to have refused an opportunity to escape, which was held out to him by an East Indiaman on the coast. He was at the time at large on his parole; but, though he considered himself ill-treated, he would not violate the ties of honour.

No single navigator has hitherto contributed so largely to our knowledge of the Australian countries as captain Flinders: besides circumnavigating Van Diemen's Land, the coasts of some of which he minutely surveyed, he explored the whole southern coast of New Holland, much of the eastern coast, Torres' Strait, and the great Gulf of Carpentaria. His observations were lively and accurate, and he seldom failed to establish an intercourse with the timid and suspicious natives of Australia. Nor were extensive hydrographical surveys the only fruits of his voyages; he was accompanied in the Investigator by Mr. Robert Brown, who, as a philosophical botanist, is without an equal, and whose volume on the botany of New Holland is among the most valuable contributions to physical geography.

By the detention of captain Flinders in Mauritius, whereby he was prevented from publishing the narrative of his expedition, the French obtained the short-lived honour of anticipating him in a display of Australian discoveries. In 1801 two ships, the Geographe and Naturaliste, commanded by captains Baudin and Hamelin, were despatched by the first consul to complete the discovery of Terra Australis. No measures were neglected which could add brilliancy and ensure success to this expedition. Men eminent in every branch of science were attached to it; but its success was by no means proportioned to the care bestowed on its equipment, and the French officers effected much less than Flinders, notwithstanding the superiority of their vessels. They saw but little of the land. The ships often parted company, and lost their time in seeking the rendezvous appointed in

case of these accidents, or in struggling with the adverse currents, in which they had imprudently engaged themselves. Their difficulties and disappointments have been ascribed to the obstinacy of the commander Baudin, who, as he died before the conclusion of the voyage, had no opportunity of vindicating his character from the charges brought against him. Peron, the naturalist, has written a narrative of the expedition, in which the name of the commander does not once occur. This writer did not under-estimate the difficulties of the undertaking: "Never had any navigator," he says, "Vancouver alone excepted, a more difficult undertaking. In fact, it is not voyages in the open ocean, however long they may be, that have in their train such misfortunes and shipwrecks; it is those which, confined to unknown shores and savage coasts, have continually new difficulties to encounter and new dangers to experience." These observations reflect much credit on Flinders, who executed so arduous a task with such inadequate means, rather than on the French, who, without encountering any of the difficulties here enumerated, gained but little knowledge of the coast. Peron, speaking of captain Flinders, who, it has been seen, had been zealously pursuing Australian discoveries since 1795, conceitedly affirms, "That he was sent by the English government to rival our endeavours." The French ship the Geographe, passing westward through Bass's Strait, met with Flinders, as we have seen, in Encounter Bay; and in his voyage on the southern coast from that point, did little more than change all the names hitherto imposed. To the extensive line of coast from Nuitz' Land to Bass's Strait he gave the designation of *Terre Napoleon:* Spencer's and St. Vincent's Gulfs were named respectively *Golfe Bonaparte* and *Josephine.* In the same manner every island and cape received a French denomination.

On the western coast the French naturalist examined the Swan River, which had been discovered in 1697 by Vlaming, and was thus named by him from the great

number of black swans which he saw there. It was not without difficulty that the French officers passed the bar of rocks which obstructs the mouth of the river; within, the depth of the stream rapidly increased: when they ascended a considerable way, the river expanded into a great basin, nearly a league wide, and almost every where extremely shallow. On climbing a hill near this part of the river, the French officers were charmed with the beauty of the prospect; on one side was discovered the upper course of the river, which descended from a range of flat mountains, in the distance, since called Darling's Range; and on the other were seen its windings down to the sea shore. The banks of the river appeared almost every where covered with beautiful forests, which extended a considerable way into the interior of the country; the soil was calcareous, composed of sand and shells, mingled in abundance with the remains of decayed vegetation.

The French officers, having passed several shoals, ascended the river about sixty miles, and found it to decrease rapidly in breadth, but to have still a depth of about eight feet, without any sensible variation. Want of provisions compelled them to return; in descending the stream they suffered much from exhaustion and the frequency of the shoals; their vexation was increased too by an inexplicable and rather ludicrous alarm. "In the midst of these increasing distresses and dangers," says M. Bailly, "night came upon us suddenly, and we were preparing to land and dry ourselves, and to recruit our exhausted strength by a little rest, when all at once we heard a terrible noise that filled us with terror; it was something like the roaring of a bull, but much louder, and seemed to proceed from the reeds, which were very near us. At this formidable sound we lost all desire to go on shore; and, though benumbed with cold, we preferred passing the night on the water without food or being able to close our eyes, and suffering the whole time from the rain and the weather." No indication has yet been discovered of any large or formidable

animal on the Australian continent beyond what is afforded by this strange story.

Sharks' Bay and the islands in its neighbourhood were diligently examined by the French, and in the archipelago to the north many points were laid down by them with accuracy; but they were in general at too great a distance from land to form a continuous survey of the coast. The ravages of disease among their crews compelled the French ships to return before they effected any thing of importance. Of twenty three men of science who embarked in the expedition only three returned to their native country, after performing the entire voyage. The kind and hospitable reception which the French navigators experienced from the English colonists at Port Jackson is gratefully acknowledged by M. Peron, who expresses, in terms of enthusiastic admiration, his surprise at the prosperous appearance of the new settlement. "The population of the colony," he says, "was to us a subject of astonishment and contemplation."

CHAP. X.

INTERIOR OF NEW HOLLAND.

CAPTAIN KING'S SURVEYS. — PORT ESSINGTON DISCOVERED. — THE MALAYS. — THE ALLIGATOR RIVERS. — MELVILLE AND BATHURST ISLANDS. — APSLEY STRAIT EXAMINED. — THE NORTH-WEST COAST. — YORK SOUND. — REGENT RIVER. — CUNNINGHAM INLET. — EXMOUTH GULF. — ARCHIPELAGO. — UNEXPLORED POINTS. — EARLY ATTEMPTS TO CROSS THE BLUE MOUNTAINS. — FAILURE OF BASS AND OTHERS. — ROUTES INTO THE INTERIOR DISCOVERED. — OXLEY'S EXPEDITION DOWN THE LACHLAN. — HE REACHES A GREAT MORASS. — SECOND JOURNEY TO EXPLORE THE MACQUARIE. — THE COUNTRY INUNDATED. — RETURNS THROUGH A FINE UNEXPLORED COUNTRY. — DISCOVERIES OF CAPTAIN STURT. — THE MURRAY RIVER FOUND TO REACH THE SEA. — DISCOVERIES OF HOVELL AND HUME. — PROGRESS OF COLONISATION. — SETTLEMENT ON MELVILLE ISLAND. — COLONY AT SWAN RIVER. — KING GEORGE'S SOUND. — PORT WESTERN. — VAN DIEMEN'S LAND.

THE discoveries hitherto made on the coasts of Australia only served to increase the mysterious interest

that invested the interior of the country; no great river, in short, had yet been discovered. During the continuance of the war little could be done to complete the task which Flinders had left unfinished; but among the numerous expeditions despatched from the shores of Great Britain on the restoration of peace, for the purpose of geographical discoveries, one was directed to survey the coasts of Australia. In four voyages, made between 1817 and 1822, captain Philip Parker King has made most important additions to our knowledge of the inter-tropical coasts of Australia.

If we review the results of his expeditions in continuation of the discoveries of Flinders, the first object worthy of attention which presents itself, is a river of considerable size on the northern coast, which was named the *Liverpool River*. The discovery of Port Essington in the peninsula to the north of Van Diemen's Gulf, promises still greater advantages. "As a harbour, Port Essington is equal, if not superior, to any I ever saw; and, from its proximity to the Moluccas and New Guinea, and its being in the direct line of communication between Port Jackson and India, as well as from its commanding situation with respect to the passage through Torres Strait, it must, at no very distant period, become a place of great trade, and of very considerable importance."

On the shores of Van Diemen's Gulf, captain King discovered several rivers of the same general character, and all named alike, from the alligators which swarmed within them. One of these rivers was examined by the boats to the distance of about thirty-six miles from the mouth, where the water was still two and a half fathoms deep. The banks were low, and thickly lined with mangroves, the country around being a level plain, occasionally diversified by some wooded hills, on which the palm tree was conspicuous. The physical character of these rivers, the sources of which must be distant, as they flow through a level plain apparently of great extent, seems to favour the conjecture that they are only the mouths of one large river, which divides itself, and reaches the sea through a sort of delta.

The gulf of the great bay of Van Diemen was discovered by three Dutch vessels, that sailed from Timor in 1705. They entered, but did not explore, it; and, up to 1818, its shores remained unknown. When captain King sailed out of it, he coasted the eastern shores of the northern Van Diemen's Land, which had hitherto been considered as a peninsula. He examined minutely the northern shores of this land; and on doubling Cape Van Diemen, its most northern point, he was surprised and delighted on discovering an inlet opening to the south, which appeared to be the mouth of a great river. Our voyagers entered it with the flood tide, and having advanced sixteen or seventeen miles, anchored in eleven fathoms. The banks being overrun with mangroves were nearly inaccessible. The country on both sides was low, and thickly wooded. The sago palm, the fan palm, and pandanus, were distinguishable among the ordinary trees of the Australian forests. Captain King and his companions entertained no doubt that they had discovered what had been long the object of anxious research on the Australian continent,—a river of considerable magnitude,—when, on advancing a few miles, the open sea suddenly appeared, and dispelled all their hopes, demonstrating that what they took to be a river was but a strait. From further examination, it appeared that the Van Diemen's Land of old maps is in reality composed of two islands, separated by the narrow channel which had so cruelly deceived our navigators, and to which captain King gave the name of *Apsley Strait.* This strait is forty miles in length, and from one to three broad; the depth is generally from ten to thirteen fathoms; but at the southern extremity there are many shoals, and the channels are very intricate. Of the two islands, the largest, which is to the eastern strait, and is perhaps 200 miles in circumference, was named *Melville Island;* that to the west, which is not perhaps above half the size of the former, was named from Lord Bathurst.

Proceeding to the south-west from *Clarence Strait,* as

the broad channel is called which separates Melville Island from the continent, the coast is generally low and uninviting in appearance. In lat. 15° captain King explored a deep inlet, to which he gave the name of *Cambridge Gulf*. Though at first it had the appearance of a great river, it was found to terminate at a distance of seventy miles from its mouth, in a few small streams of no importance.

The examination of the northern half of De Witt's Land was repaid by results of a more interesting nature. Here the country assumed a more bold and mountainous character, and the shore was indented with numerous deep bays and inlets. Some of these, such as Admiralty Gulf, York Sound, and Brunswick Bay, were carefully examined, and found to contain many excellent harbours. Brunswick Bay is an extensive sound, running about twenty miles inland, with good anchorage all over it. At the head of the sound was discovered Prince Regent's River, which, to use the language of captain King, "is, without exception, the most remarkable feature of the north-west coast. In general the inlets of this coast form extensive ports at their entrance; and when they begin to assume the character of a river, their course becomes tortuous and very irregular. But Prince Regent's River extends into the interior in a S.E.E. direction for fifty-four miles, with scarcely a point to intercept the view, after being thirteen miles within it." At the fiftieth mile, a ridge of rocks, crossing this river, forms a rapid, above which the tide does not reach; but above the rapid the stream formed a beautiful fresh water river, of limpid clearness, and 300 yards in width. About a mile below the rapid it was joined by an inferior stream, which fell from a height of 140 feet; and though our voyagers visited this coast at the dry season, this cascade nevertheless made an imposing appearance. The marks of great floods were noticed upon the shores of the inlet; and the trunks of very large trees were seen thrown up to the height of twelve feet above high water mark. As the surrounding country was comparatively bare and

sterile, these trees afford some evidence of the fertility of the interior.

As the circumstances of a long navigation, which must be completed within a certain season, render it impossible to explore deep inlets in a satisfactory manner, and thus to form such a minute survey of the coast as might throw a light on the interior geography of the country; captain King, notwithstanding his zeal and intrepidity, did not venture to contend with the difficulties which were here thrown in his way; and, having lost nearly all his anchors, was cautious of engaging in the perilous navigation of the north-west coast. He does not, however, disingenuously attempt to underrate the importance of the omissions in his chart, or to suggest that no interest attaches to those portions of the coast which he was unable to explore. On the contrary, expressing his regret at his inability to examine a deep inlet near Point Cunningham, he observes, "From all that is at present known of this remarkable opening, there is enough to excite the greatest interest; since from the extent of the opening, the rapidity of the stream, and the great rise and fall of the tides, there must be a very extensive gulf, or water, totally different from every thing which has been before seen." About 100 miles farther to the south is another wide opening, near *Point Gantheaume*, which has been supposed to communicate with the former, so as to form a great island. On the remainder of the north-western coast there is little doubt that the main land has been rarely seen, and that the coast line hitherto laid down in the maps is but an imperfect delineation of the exterior limit of a dense archipelago. Exmouth Gulf also, another deep inlet, bounded on the west by the great peninsula, or perhaps island, of which North-West Cape forms the termination, was left imperfectly explored; so that the survey of captain King, though productive of much positive and valuable information, was yet not so complete as to reduce to absolute despair the advocates of a great Australian river discharging itself into the ocean. The prominent por-

tions of the Australian continent, the deep bays and inlets which might prove to be the mouths of great rivers, but in which a ship is in danger of being ingulfed, still remained to be examined.

Our acquaintance with the interior of this vast country advanced for a long time much more slowly than our acquaintance with its coasts. That range of mountains which runs parallel to the eastern shore, at an average distance of about forty miles from the sea, and which are generally called the Blue Mountains by the colonists, continued long to be an insuperable barrier against the examination of the interior. The summits of this range to the west of Sydney do not much exceed 3000 feet in height, but farther to the north they frequently attain double that elevation. The whole range, however, has so precipitous a face towards the east, and is so rarely intersected by transverse valleys, that for many years after the establishment of the colony they were looked upon as absolutely impassable.

In December, 1789, the year after the establishment of the colony at Port Jackson, lieutenant Daws proceeded to reconnoitre the mountains, with a large detachment of troops, and provisions for six days; but, after enduring the fatigues of nine days' march, he returned to Port Jackson, without being able to penetrate more than nine miles through the first range of hills. Eight months afterwards, captain Tench made a similar attempt, and experienced a similar disappointment. In consequence of these failures, no further attempt was made to ascend the Blue Mountains for the space of three years, when the celebrated colonel Paterson, who had become inured, in the deserts of Africa, to the fatigues of travelling, undertook a new expedition with sanguine hopes of success. His plan was to ascend the Hawkesbury River as far as it was navigable, and thus to arrive at the base of the mountains over which he was to pass. He chose for his companions some hardy Scotch Highlanders, inured, like himself, from early life to climb the most difficult mountains; and took with him

also some natives of Port Jackson, to serve as guides and interpreters. But all these preparations proved fruitless: one of the canoes was sunk, the other irreparably injured by the rapids of the river. In vain did the travellers attempt to continue their route towards the interior of the mountains; their difficulties increased at every step. One of these mountains was not less than 400 feet in perpendicular height. Frightful precipices every where presented themselves; and no sooner had one summit been escaladed than others appeared, still more barren and difficult of access, till at length they found it necessary to retrace their steps.

About a year afterwards, Mr. Hacking, quarter-master of the Sirius, a bold and spirited man, rather stimulated than daunted by the failure of colonel Paterson, sallied forth with a few intrepid companions to pass those impregnable barriers. Their efforts were not altogether useless: they penetrated about twenty miles farther than their predecessors; but, after having cleared several very high summits, Hacking himself was forced to return. Beyond the peaks which he succeeded in ascending, the mountains presented a new ridge of summits, which he conceived less accessible than those he had attained.

Among the early discoverers in Australia, Mr. Bass holds the foremost rank for skill, boldness, and perseverance. In June, 1796, this adventurous man made an attempt to penetrate the Blue Mountains. Never was hardihood more displayed than on this occasion. By means of iron hooks, fastened to his arms, he succeeded in ascending several dangerous precipices, and when stopped in his route by deep chasms, he caused himself to be let down with ropes into the abysses. But even his resolution was of no avail; and, after fifteen days of fatigue and unparalleled danger, he returned to Sydney, confirming by his own failure all that had been asserted of the impossibility of crossing those extraordinary ramparts. From the summit of one very elevated peak, Mr. Bass saw, at the distance of about forty miles, a second chain of mountains, much higher than any of these he

had passed; and the intermediate space presented obstacles neither fewer nor less formidable than what he had already encountered.

The next attempt to explore a passage across the western mountains was made by M. Bareillier, a French emigrant, who was engineer to the colony. In addition to the precautions which had been taken on the previous enterprises, the prudent measure was adopted of establishing a chain of posts at moderate distances, so as to maintain an active line of communication between the exploring party and the nearest of the English settlements; but, notwithstanding the sagacity with which this expedition was planned, M. Bareillier was not more fortunate than those who had preceeded him, and indeed did not even penetrate so far as Mr. Bass and some others.

In addition to these numerous failures, other circumstances contributed to inspire the colonists with the belief that the Blue Mountains formed an impassable barrier. The natives of the country were as little acquainted with them as the Europeans. They even regarded them with religious awe, as the residence of malignant spirits, whence thunder, inundations, and burning winds issued to lay waste their territories. They asserted, moreover, that beyond those mountains there was an immense lake, on the banks of which lived white people, like the English, who dressed in the same manner, and had large towns, with houses built of stone. Such fables, relating to a country not very distant, seemed to argue that it was wholly inaccessible.

Thus the transalpine regions remained wholly unknown till 1813, when a route across the mountains was discovered, leading due west from Sydney, from Emu Plains over the hills, to an open, fertile, and well watered country. As soon as this important route was discovered, a road was constructed; and on the 25th of April, 1815, governor Macquarie, with his lady, and a numerous retinue, went over the Blue Mountains, so long deemed impassable. The highest point of this road is on a plain

of considerable extent, whence an unbounded and diversified prospect presents itself to the eye on all sides. The town of Windsor, the river Hawkesbury, and other interesting objects within the inhabited portion of the colony, are distinctly visible. The road from this table-land descends gradually for some miles towards the west, when the slope suddenly terminates in a precipice of 670 feet in height, and nearly perpendicular. The winding road constructed down this rugged and tremendous descent has received, in order to commemorate the services of the engineer, the name of Cox's Pass.

The governor, having reached the open country to the west of the Blue Mountains, fixed immediately on a site suitable for the erection of a town at some future period, to which he gave the name of Bathurst. He chose an elevated spot on the south bank of a fine river flowing to the north-west, which was named from himself the Macquarie River. Within a distance of ten miles round this spot, there were estimated to be not less than 50,000 acres of land, clear of timber and well suited for the purposes of grazing or agriculture. The country at the same time abounded in game, and the river in excellent fish. The site of Bathurst was observed to be in lat. 33° 24′ 30″ south, and in long. 149° 29′ 30″ east. The distance on the road from Sydney is 140 miles. Another pass across the mountains was discovered in 1819, by Mr. Throsby, considerably to the south of the former; and as the population of the colony presses towards the hills, it is probable that many more will be brought to light.

The discovery of a boundless range of fertile land in Bathurst Plains was of the utmost importance to the colony, and was made, at a time indeed when it was peculiarly acceptable, when the increase of population, in a narrow strip of territory not remarkable for fertility, had nearly outrun the prosperity of agriculture. A road being once opened to the western country, it was natural to suppose that such an interesting discovery would be prosecuted with extreme ardour. Mr. Oxley, the sur-

veyor of the colony, was despatched to explore the country between Bathurst and the Lachlan, a considerable river about eighty miles to the west, the sources of which had been some time before discovered. Mr. Oxley found the country in the beginning of his journey, like that in the vicinity of Bathurst, agreeably diversified with hill and dale, covered with luxuriant herbage, but producing little timber, and that of a diminutive description. It was well intersected with rivulets; and, finally, it abounded with limestone of the very best quality. A peculiar importance was attached to this last discovery, from the circumstance that it was the first limestone rock discovered in New South Wales.

On the 25th of April, Mr. Oxley and his party arrived at the dépôt which had been previously established on the Lachlan for the service of the expedition. The country here was found, by barometrical measurement, to have an elevation of only 600 feet above the level of the sea; while Bathurst Plains were ascertained, by the same means, to be 1970 feet above the sea. This sudden depression of the country augured ill for the length of the river. From the 27th of April to the 12th of May, Mr. Oxley descended the river in the boats; until, finding the country all inundated to the west and north-west, and the river itself, which for some time had borne the appearance of a stagnant canal, being lost in the marshes, he deemed it inexpedient to pursue its channels any farther. He then proceeded for several days towards the south-west; when, having lost some horses through fatigue and want of water, he was obliged to change his course to the north, towards some low hills, which were perceived running in that direction. He had not persevered long in this course when he fell in with a stream: it was soon recognised to be the Lachlan, which here emerged from the marshes. The banks of the stream were again followed till the 8th of July, when further progress westward appeared useless, if not impossible. The river received no tributary streams; but, on the other hand, wasted itself in numerous la-

goons. The country was a dead level, bounded by the horizon in every quarter, devoid of timber, and was evidently liable to inundations whenever the river was flooded. The place where the river Lachlan terminates in this singular manner is full 500 miles west of Sydney, and nearly in the same latitude. It had required six weeks of unlimited exertion to proceed so far. The length of the river, including its windings, is upwards of 1200 miles, during the greater part of which this singular stream receives no tributaries, until it finally wastes itself in a desert plain.

The provisions of the travellers being now nearly exhausted, they hastened to direct their steps to the Macquarie, to ascertain what became of that river, which it was evident did not join the Lachlan. At first the journey lay through a desert country; but, on gaining the hills, the prospect suddenly changed; and, after a fortnight's march, they encamped on a considerable stream, running from the south, and watering a rich and romantic valley, which received the name of Wellington Valley. This stream was at first conceived to be the Macquarie; but Mr. Oxley, impatient to explore the country to the north, descended the stream to a little distance, when he was no less astonished than delighted to discover that it joined a very fine river, coming from the E.S.E., from among the chain of low grassy hills that bounded the valley to the east. This was evidently the long-sought Macquarie, the sight of which amply repaid our travellers for their former disappointments. This short excursion down the river confirmed the high opinion our travellers had already formed of the fertility of the country. On their journey towards Bathurst they found the country hilly, but rich, and of a beautiful appearance; but the timber degenerated as they approached Bathurst Plains. The most important characteristic of this tract is the infinite number of streams with which it is intersected. Speaking of these, Mr. Oxley observes: "Had not the appearance of the country round the Macquarie, where we first reached it, fully accounted

for its magnitude, the course which we have since followed would have satisfactorily explained the cause. It is, in point of fact, a country of running waters: on every hill we found a spring, and in every valley a rivulet, either flowing directly north-east of the river, or taking a course westerly, to join the river in Wellington Vale. Of the waters which may fall into it from the north-east, the appearances of the country indicate that they were at least as numerous as from the south-west." A settlement has since been made in Wellington Valley, at the junction of Bell's River and the Macquarie; and this remote spot, above 200 miles west of Sydney, appears destined, from its fertility and the beauty of its situation, to become one of the most flourishing of the western country.

The glowing description which Mr. Oxley and his companions gave of the Macquarie and the scenery around it, its numerous rivulets, limestone quarries, and fine timber, disposed as if in a park, inflamed the enthusiasm of the colonists, and encouraged the hope that this noble stream would be found to discharge itself into the ocean. Such a navigable communication between the western country and the sea was alone wanting to complete the charms of the new discoveries, and to give them an inestimable value. A new expedition was immediately resolved on, to explore, if possible, the river to its mouth, and a dépôt for the use of the travellers was formed in Wellington Valley.

In the month of May, 1818, Mr. Oxley quitted Sydney to proceed on a second excursion into the interior. For several days after our travellers descended below Wellington Valley, the river continued to flow in a majestic stream through a country with as fine an appearance as any which has been hitherto described. A considerable river, named the Erskine, falling into it from the eastward, seemed to be an omen of ultimate success, as it proved the Macquarie to be the grand receptacle of the waters of the interior. After descending the river for the distance of 125 miles from Wel-

lington Valley, the hills disappeared, and the country became perfectly level; but the soil was excellent, and far above the reach of any flood. From this place two men were sent back to the governor, to acquaint him with the proceedings of the expedition. When they departed, high expectations were entertained of ultimate success.

"On the 28th of June," says Mr. Oxley, "having traced the course of the river, without the smallest diminution or addition, about seventy miles farther to the N.N.W., there being a slight fresh in the river, it overflowed its banks; and although we were at the distance of near three miles from it, the country was so perfectly level that the waters soon spread over the ground on which we were, we being for some days before travelling over such very low ground that the people in the boats, finding the country flooded, proceeded slowly; a circumstance which enabled me to send them directions to return to the station we had quitted in the morning, where the ground was a little more elevated. This spot being by no means secure, it was arranged that the horses with the provisions should return to the last high land we had quitted,—a distance of sixteen miles; while I determined to take the large boat, and in her to endeavour to discover the point where the waters discharged themselves.

"On the 2d of July, I proceeded in the boat down the river, and in the course of the day went near thirty miles towards the N.N.W., for ten of which there had been, strictly speaking, no land, as the flood made the surrounding country a perfect sea. The banks of the river were heavily timbered, and many large spaces within our view, covered with a common reed, were also encircled with large trees. On the 3d, the main channel of the river was much contracted, but very deep, the banks being under water from a foot to eighteen inches. The stream continued for about twenty miles on the same course as yesterday, when we totally lost sight of land and trees, the channel of the river winding through reeds, among which the water was about three feet

deep, the current having the same direction as the river. It continued in this manner for nearly four miles more, when, without any previous change in the breadth, depth, and rapidity of the stream, and when I was sanguine in the expectations of soon entering the long sought for lake, it all at once eluded our further pursuit, by spreading at all points from north-west to north-east, over the plain of reeds that surrounded us; the river decreasing in depth from upwards of twenty feet to less than five feet, and flowing over a bottom of tenacious blue mud, and the current still running with nearly the same rapidity as when the water was confined within the banks of the river. This point of junction with interior waters, or where the Macquarie ceased to have the form of a river, is in lat. 30° 45′ S., and long. 147° 10′ E."

Thus it was found that the river diffused itself into a shallow morass of unbounded extent, which concealed the limits of the deep lake which formed the receptacle of its waters, if such a lake exist. Mr. Oxley being unable to prosecute his researches towards the N.W., bent his course eastward in a direct line to the coast. In his march towards the Blue Mountains, he crossed no less than twelve fine streams, running generally in the direction of west and north, nearly parallel to the Macquarie. One of these, named the Castlereagh, at no great distance from the last named river, was thought to be superior to it in magnitude; another, named Peel's River, was nearly equal to the Macquarie, and watered a country of the most beautiful appearance. As soon as our travellers quitted the level which terminated in the morass, and reached the hills, the view presented to their eyes on all sides was of the most varied and luxuriant description. They crossed plains, of many miles in extent, of dry and fertile soil, with trees scattered on them as in a park. Chains and ridges of low forest hills, clothed with woods of cypress, eucalyptus, and acacias, in full flower, were scattered over these plains, detached like islands, and varied the scenery in the most pic-

turesque manner. Two hills were ascended, the one named Mount Tetley, the other Loadstone Hill; both which affected the magnetic needle in a remarkable manner, its poles being reversed while placed on the rock.

When Mr. Oxley and his party reached the summit of the Blue Mountains, they were for some time at a loss how to descend them towards the east. The soil of this mountain range was poor, but the timber seemed unaffected by the circumstance. The trees were of the most stately dimensions, and these mountain forests equalled in size and quality the finest woods of the eastern colony. Our travellers had been checked, in their progress eastward, by many perpendicular rocky ridges, running from north to south, and divided longitudinally by deep and apparently impassable glens. These, however, they contrived to cross; but their march was at length arrested by a deep chasm, far exceeding in sublimity any they had seen before. "This tremendous ravine," says Mr. Oxley, "runs nearly north and south: its breadth at the bottom does not apparently exceed 100 or 200 feet, while the separation of the outer edges is from two to three miles. I am certain that in perpendicular depth it exceeds 3000 feet." Our travellers marched for some days to the south, having on their left hand a wild and broken country, similar to that described. They found several cascades of unequalled magnificence, and at length fortunately discovered a glen, by which a descent was practicable. They followed for some time the course of a bold stream descending from the mountains, which turned out to be tributary to the Hastings, which falls into the sea at Macquarie Harbour. Their journey from the Blue Mountains towards the sea was impeded by a succession of abrupt and lofty hills, the descent of which would have been often impracticable, had it not been for the immense profusion of vines and creeping plants, with which the travellers were enabled to support their steps. At length, on the 23d of September, Mr. Oxley and his party caught the first glimpse of the ocean from the summit of a hill,

to which he gave the name of Sea View Mount. He then travelled towards the shore, along the banks of the Hastings, of which he gave such an account on his return as encouraged the plan of forming a settlement there. Thus Mr. Oxley crossed the country near 300 miles in a straight line; and for the greater part of that distance his route lay through a well watered and fertile country. He had not found, indeed, any communication between the internal waters and the sea; but he had, in compensation, discovered an indefinite extent of fine land, fitted for all the purposes of grazing and agriculture, and at no great distance from the coast.

In the mean time the spirit of enquiry was actively employed in another direction. Two gentlemen of the colony, Messrs. Hovell and Hume, examined, with signal success, the south-eastern part of the country. Commencing their examination at Twofold Bay, they proceeded to the south-west, and travelled through an open, dry, and luxuriant country, thinly clothed with large timber, till they arrived at the banks of a considerable river; following the course of this stream, they were delighted to find that it discharged itself into Port Western, round which the country had the most inviting appearance. Thus, whatever exaggeration may be suspected in colonial travellers, whose spirits are elated by hope and the love of adventure, it is obvious that New South Wales is not that arid and sterile desert which some have represented it. It has abundance of rivers, though they are not always navigable; and an ample extent of productive soil, though not equalling in richness the prairies of America.

In 1829, a new attempt was made to trace the course of the internal waters. Captain Sturt proceeded with a party to explore the outlets of the Macquarie and Castlereagh: having crossed the great morass into which these rivers discharge themselves, he entered on a flat desert country, totally destitute of vegetation; and at length discovered, in long. 145°, lat. 30°, a considerable river running towards the south-west. After following

its course for a little way, he was obliged to desist from his researches and to return homeward, being then about 600 miles north-west of Sydney. The newly-discovered river was named the *Darling*, from the governor of the colony.

A discovery of more importance, because more complete in its results, has been recently made by the same officer. On the 7th of January, 1830, captain Sturt proceeded with a party down the Morrumbidgee, a considerable stream, about 200 miles to the south-west of Sydney, and which was supposed to form a junction with the Lachlan. The dépôt formed for the purpose of the expedition, and from which it departed, was in long. 143° 57′, lat. 34° 15′; being thus at a considerable distance to the south-west of the extreme point reached by Mr. Oxley when exploring the Lachlan. About twelve miles below the dépôt a creek entered the river from the north-east, and was supposed to form a communication with the Lachlan. On the seventh day of the voyage the channel of the river contracted, and the current became so impetuous as to fill our people with alarm: they almost despaired of being able to prosecute their voyage any farther, when the channel opened, and they found themselves at once launched into a broad and noble river running from east to west, and from 300 to 400 feet in width. On the 23d a body of natives, about 100 in number, appeared on the right bank of the river, evidently meditating an attack on the boat: this was the more vexatious, as the attention of our voyagers was nearly engrossed by the sand-banks which obstructed their progress: but here again their alarm was suddenly changed into joy. The natives had evinced such a determination to act on the offensive as even to wade into the water to seize the boat, but, with the unaccountable caprice of savages, they suddenly desisted, and allowed the strangers to proceed in quiet. The boat had no sooner cleared the sand-banks than a great river was discovered joining the Morrumbidgee from the east at a very acute angle: the narrow tongue of land

which separated the two rivers was that on which the Indians made their appearance. The great river, resulting from the union of the Morrumbidgee and the Darling, as the other river was supposed to be, was named by our travellers the *Murray:* the country on its banks had a fine appearance, being well clothed with verdure and with trees. Their course was generally west, so that they reached the longitude of 149° 40′ without descending below lat. 34°. Limestone was the prevailing mineral. The channel of the river had for a long way the appearance of a deep picturesque glen; but it afterwards changed its direction to the eastward of south, flowing in long reaches, being about 400 yards wide, with twenty feet of water close to the shore. This change of appearance raised the expectations of our travellers, who were soon gratified by entering a great lake, extending fifty or sixty miles in length, and from thirty to forty in breadth. The country was by no means barren, but the timber was less luxuriant than up the river. At the distance of seven miles from the mouth of the Murray the water of the lake was brackish, and at a distance of twenty-one miles it was quite salt: it was natural to infer, therefore, that it had a communication with the sea: this was soon proved to be the case. Frequent shoals impeding the navigation of the boat on the south side of the lake, captain Sturt landed, and found that he had reached the sea at Encounter Bay, with which the lake communicated by an outlet half a mile in width, and navigable for boats. It was conjectured that other communications might be found, but the exhausted state of the exploring party did not allow of their making an exact survey of their discoveries. Lake *Alexandrina,* as this great sheet of water was named by captain Sturt, is situated directly to the east of St. Vincent's Gulf, and appears itself like a great gulf, the mouth of which has been stopped up by sand-banks. The provisions of the party, of which a portion had been lost by the upsetting of the boat, were now nearly consumed; and so great was the labour required to stem

the current of the river, that the men were nearly worn out by fatigue when they reached the dépôt: they had been absent from it eighty-eight days, and in that time had travelled about 2000 miles. A river named the Lindsay flowed into the Murray from the south-east. If captain Sturt be correct in his conjectures that the Morrumbidgee communicates with the Lachlan, and that the great river which joins it from the east is the Darling, discovered in his former expedition, it follows that an immense extent of water communication exists in the interior, and that the Murray is probably the channel by which all the rivers, hitherto discovered running westward from the Blue Mountains, join the sea.

While the enterprise and perseverance of Mr. Oxley, Mr. Sturt, and others, have thus opened such an unbounded field to the speculations of colonial agriculturists, government has not been inattentive to the commercial advantages likely to arise from numberless settlements, at considerable distances from each other, and in different climates. On the eastern coast colonisation has extended as far as Moreton Bay, 450 miles to the north of Sydney: at an equal distance to the south and west a colony has been recently established in Port Western, in the hope of turning to account the fine tract of country explored by Messrs. Hovell and Hume.

But of all the coasts of this great continent, the northern have the strongest claims to the regards of a speculative commercial nation. The great fisheries carried on there by the Malays support an advantageous trade with the Chinese: the general comparative fertility also of that portion of the coast; the warmth of its climate, which, lying within the tropics, enables it to produce many articles that are wanting in the southern colonies; its proximity to the Indian archipelago, inhabited by an active commercial people rapidly advancing in civilisation,—all these circumstances combine to point out the advantages likely to result, at no great distance of time, from a colony established on the northern shores. The survey made by captain King was a preliminary step to

the accomplishment of this purpose; and, in the beginning of 1824, the Tamar, captain Brewer, was despatched to take possession of Arnhem's Land, and to form an establishment on whatever spot was deemed most eligible for a mercantile dépôt. The Tamar left Sydney in August; and, having cleared Torres Strait, came to an anchor in Port Essington: where the union jack was hoisted on shore, and formal possession was taken of the whole northern coast between the meridians of 139° and 136°. No fresh water, however, was found there, and the ship proceeded to Apsley Strait, where a small river was discovered on Melville Island, running into the strait near Harris Island: this was immediately pitched upon as a convenient site for the colony. On the 2d of October they commenced the erection of Fort Dundas: the little promontory on which it stood received the name of Barlow Point, and the anchorage in the strait, Port Cockburn. The soil near the new settlement was found to be extremely rich, but the woods were thick. No natives made their appearance till November; but afterwards their frequent thefts gave rise to hostilities, which kept the infant colony in perpetual alarm. The settlers amounted in all to 126 individuals, of whom three or four were women, and forty-five convicts; the rest were soldiers of the 3d regiment. This important colony languished for some time, and was even on the point of being abandoned, nor are we sure that it has yet reached a state of confirmed prosperity; but it is to be hoped that government will not be deterred by ordinary difficulties from establishing a colony in so favourable a situation. How can presages of success be expected from a settlement composed in the first instance of unwilling residents, such as soldiers and convicts, without the sanguine spirit, the resignation, and the perseverance inspired by the presence of their families, and the prospect of permanent occupation?

The colony on the Swan River, established in the beginning of 1829, has already assumed the appearance of strength and stability; owing to the good materials

with which it was constructed. Emigrants, possessing energy, intelligence, and capital, are sure of overcoming the difficulties that await every settler in a new country. The Swan River has been explored to the distance of about eighty miles from its mouth. The country in the interior is found fit for pasture, and capable of tillage; but the soil is by no means remarkably fertile; towards the sea it is sandy and barren in the extreme. The Canning River, flowing into the Swan River from the south, has as yet been examined but a little way. The great objection to this colony is the want of a secure harbour in its vicinity. The mouth of the Swan River is barred by a ledge of rocks, over which there is hardly six feet water; and Gage's Roads, between the river and the island of Rottnest, are exposed to the weather from the south and south west; but, in the close of 1829, a fine river, with a spacious port at its mouth, was said to have been discovered at some distance to the south, falling into the sea near Cape Bouvard; and a party was then sent to explore it. The difficulties and embarrassments which the settlers at the Swan River have been obliged to endure, have been industriously exaggerated by the colonial press; the strong desire which exists in New South Wales to attract emigrants to that country being naturally allied with a disposition to disparage every other settlement.

The same indefatigable spirit of colonisation led to the formation of a settlement in 1826, in King George the Third's Sound. This, it is well known, is the first good harbour which ships sailing from Europe to New South Wales arrive at, and the place is likely to become a depôt for cattle and a resting-place for shipping, so as to lessen the risks of the tedious navigation round the southern coast. In Van Diemen's Land colonisation extends through the middle of the island, from the Derwent on the south to the Tamar and Port Dalrymple, opening on the northern coast. Port Macquarie on the western shore, where the fine Huon pines are found in abundance, is much frequented by colonial shipping;

and will, probably, at no distant day, become an important settlement. Thus there is scarcely a good harbour round all the shores of Australia, of which the English have not taken possession: Sharks' Bay, 400 miles to the north of the Swan River, is the only eligible spot which has escaped them. It was supposed that the French entertained the design of making a settlement upon that coast; but, if they abandon that intention, it is to be hoped that the colonial government will not overlook the advantages of a spot, which affords the only secure anchorage hitherto found on the western shores of New Holland.

CHAP. XI.

VANCOUVER'S VOYAGE.

COMMENCEMENT OF THE FUR TRADE. — VOYAGES OF MEARES. — OF PORTLOCK AND DIXON. — OF GREY. — THEIR DISCOVERIES. — FUCA'S STRAIT. — JEALOUSY OF THE SPANIARDS AWAKENED BY THE RUSSIANS. — SETTLEMENT MADE AT MONTEREY. — EXPEDITION TO THE NORTH. — PORT BUCARELLI DISCOVERED. — SECOND EXPEDITION — ITS RESULTS. — VOYAGE OF HARO AND MARTINEZ. — THE SPANIARDS TAKE POSSESSION OF NOOTKA — THEY SEIZE AN ENGLISH VESSEL. — THE DISPUTE ACCOMMODATED. — VANCOUVER PROCEEDS TO RECEIVE RESTITUTION OF NOOTKA — HE IS INSTRUCTED TO SURVEY THE NORTH-WEST COAST OF AMERICA. — VOYAGE ALONG NEW HOLLAND. — CHATHAM ISLAND DISCOVERED. — VANCOUVER ENTERS FUCA'S STRAIT. — IT CONDUCTS HIM NORTHWARDS TO THE SEA. — HE MEETS WITH THE SPANISH SURVEYORS. — ARRIVAL AT NOOTKA. — COLUMBIA RIVER EXPLORED. — CHARACTER OF THE NATIVES. — THEIR ARCHITECTURE. — THE SHIPS WINTER AT THE SANDWICH ISLANDS. — OWHYHEE VOLUNTARILY CEDED TO THE KING OF GREAT BRITAIN. — VANCOUVER RETURNS TO THE AMERICAN COAST. — COMPLETES THE SURVEY — HIS GREAT MERITS — DEATH. — ENGLISH POSSESSIONS ON THE NORTH-WEST COAST. — VOYAGE OF KOTZEBUE. — HIS INLET.

THE sensation created in Europe by Cook's geographical discoveries, was much exceeded in its immediate effects

by the excitement occasioned when it was known what a lucrative trade remained to be developed between China and the north-west coast of America. The furs collected by the Russians in the Fox Islands, sent by them to Kamtschatka, and thence to Kiachta, arrive in China, after passing through many hands, and performing a circuitous journey of many thousand miles, with a price enormously enhanced by the clumsy and complicated system by which they are forwarded to their destination. The Russians not yet acquainted with the refinements of commerce, and the Spaniards rendered torpid and inactive by the vices of a despotic government, had both remained in ignorance of the advantages that might be derived from a fur trade carried on directly between the coast of America and China, though the dominions of both adjoin the countries which support the trade. It remained for the English to make the circuit of the globe, in order to carry on a trade, which the nations more conveniently situated were too barbarous or too inert to engage in.

The last volume of Cook's voyages, in which captain King explains the profits that might be made by the fur trade, was published in 1784: and in the following year captain Hanna sailed from Canton, in a small brig of sixty tons, across the seas of Japan; and in the month of August arrived at Nootka Sound, which the experience of Cook had taught to be considered as the great mart of the furs of America. Proceeding to the northward he discovered some fine harbours, and returned to China at the end of the year with a rich cargo of furs. This was the commencement of a trade which afterwards rose to such great importance, and which has given a greater impulse to navigation than any other, except, perhaps, the whale fishery. In the following year captain Hanna returned to the fur coast, and again procured a valuable cargo. A rival ship, despatched from Macao about the same time, proceeded by the route of Kamtschatka, and was lost on Copper Island. At first this trade was carried on by ships from the river of Canton,

which had obvious advantages in its situation; but, in 1786, two ships, commanded by captains Lowrie and Guise, sailed from Bombay to Nootka Sound; and, advancing northwards, are said to have discovered the archipelago, to which Dixon afterwards gave the name of Queen Charlotte's Islands. Expeditions from Bengal followed close on those from the coast of Malabar. Captain Tipping, in the Sea Otter, was lost; but captain Meares, in the Nootka, arrived in Prince William's Sound, where he was forced to spend the winter. Twenty-three of his people died from the severity of the climate and the want of provision; but Meares returned to Macao in the following year. His wintering on the coast of America, which was an act of necessity, was a decided step towards establishing a more intimate intercourse with the people.

If the English merchants established at Macao and India were the first to engage actively in the fur trade, they owed this temporary advantage merely to their position; although shipping from the Thames should have to pass round Cape Horn, and perform a voyage equal to half the circumference of the globe before it arrived at the scene of action, yet spirit and enterprise were not wanting to engage in an undertaking which marks the utmost extent to which the spirit of trade can urge the boldness of navigation. In 1785 a number of merchants formed an association under the name of the King George's Sound Company; they entered into negotiations with the South Sea and East India Companies, and purchased from both a suspension of those baneful privileges by which monopoly, however indolent itself, may fetter the active industry of others. In the same year the newly formed company despatched two ships, under the command of captains Portlock and Dixon, who had both voyaged with Cook, and obtained under that distinguished commander a competent share of nautical experience. They arrived on the north-west coast of America in 1786, and then proceeded to winter in the Sandwich Islands, justly deeming it preferable to employ the sea-

men in temperate climates, than to expose them to the maladies and privations of a North American winter. In the spring of 1787 they returned to the American coast, separating so that they might not interfere with each other in their traffic with the natives. Portlock examined a number of inlets and harbours along the coast, to which he gave names, some of which are still retained, and the repetition of which would afford but little instruction. Dixon, in like manner, gained a minute knowledge of the portion of the coast along which he traded: directing his course to the southward, he discovered, in lat. 54° 24′, the commencement of a chain of islands; and, following along its western shore to its southern extremity, he doubled it to the southward, and stood again to the northward, ranging along the eastern shore as far as 53° 10′. In this latitude he perceived to the eastward, in the distance, a cape of the continent, on which he imposed the name of Cape Dalrymple; a homage deservedly paid to a learned navigator, whose hydrographical labours and writings, by improving the description of the globe, have facilitated the communications between the old and new worlds. To the group of islands which Dixon had nearly circumnavigated, he gave the name of *Queen Charlotte's Islands*. The honour, indeed, of having discovered these islands is claimed by the French for La Perouse, who, in the preceding year (1786), had surveyed their western shores; but it must be observed, that captains Lowrie and Guise made the same discovery about the same time as the French navigator. Dixon then visited Nootka Sound, where he met some English vessels belonging to his employers, and, as they informed him that the trade for the year was quite exhausted in that quarter, he sailed for the Sandwich Islands, where he rejoined captain Portlock,

The vessels which had hitherto engaged in the fur trade in general confined their visits to Nootka, Prince William's Sound, and other places pointed out by Cook; but Portlock and Dixon, who took a more extensive

range, had the good fortune to find shores more productive of the commodities they sought; and where the natives, unused to commercial visits, disposed of their merchandise on more reasonable terms. Their cargoes in consequence were unusually rich, and their success ministered new fuel to the ardour of trading with the north west coast of America.

The ships which captain Dixon had met coming out of Nootka Sound were the Prince of Wales and the Princess Royal, commanded respectively by captains Colnett and Duncan. They left England in September, 1786, and had begun by establishing, on Staaten Land near Tierra del Fuego, a factory for the purpose of collecting seal skins, and for preparing seal oil. They then proceeded to Nootka; and, wintering at the Sandwich Islands, returned to the American coast in 1788. Captain Duncan anchored and traded in several harbours on the eastern coast of Queen Charlotte's Islands; he then crossed the channel which separates these islands from the continent, and proceeded to another group situated to the eastward, which he named *Princess Royal's Islands* and which occupy collectively the space comprised between the parallels of fifty-four and fifty-one. This archipelago affords, among the numerous islands of which it is composed, bays, harbours, and inlets without number, a part of which captain Duncan examined. In nineteen of them he cast anchor, not without being frequently exposed to the danger of losing his vessel; but an abundant trade indemnified him for his fatigues, and made him forget the risk that he ran. He pushed his examination of the coast as far as 47°, having noticed in 48° 30′ an opening which he calls Fuca's Strait, and then directed his course to the Sandwich Islands.

In 1788 Meares undertook a second voyage to the north-west coast of America, in the Felice, accompanied by captain Douglas, in the Iphigenia. By his activity and perseverance he succeeded in building a small vessel in Nootka Sound; he then proceeded southward to examine the Strait of Fuca, in which his long boat sailed,

he says, near thirty leagues; and at that distance from the sea the strait was about fifteen leagues broad, with a clear horizon stretching to the east for fifteen leagues more. Meares appears to have always doubted whether the land in which Nootka Sound was situated, was on the continent of America or not; indeed he observes, that the coast abounds with islands, and that it remains to be determined whether any land yet seen by the traders is really continent. His comrade, captain Douglas, beginning his voyage round the coast at Cook's River, lat. 61°, proceeded southward, and was the first to sail through all the channel that separates Queen Charlotte's Islands from the Princess Royal's Islands and the Main.

The lucrative trade thus carried on by the English on the north-west coast of America, and the declarations of Dixon and others that it was quite inexhaustible, attracted the attention and roused the energy of every state that possessed a commercial marine. The United States of America, which had just obtained their political independence, were peculiarly interested in securing to themselves a portion of the newly discovered trade. They were as yet too poor to carry on an intercourse with China, unless they entered the markets of that nation with furs, the only merchandise which the Chinese admit. In 1788 captain Grey, with two small ships, the Washington and Columbia, arrived on the north-west coast of America, after a tedious voyage from Boston round Cape Horn of more than a year. Grey received from Meares an account of the Straits of Fuca; and, according to the latter, having entered for the purpose of exploring them, he sailed through a sea extending upwards of eight degrees of latitude, and nearly four degrees to the east of Nootka. This exaggerated statement caused a strong sensation among those who believed in the discoveries of the Greek pilot; but it was not sufficiently distinct or authentic to cause any alteration in the best maps. Thus it appears that, by the year 1789, English vessels had examined the whole north-west coast of America from 47° to 60°, and the charts and surveys of these trading navigators,

being compared and combined, formed a tolerably correct outline of a very intricate line of coast. The ships of other nations had engaged in the trade, but the English were by far the most numerous and most successful. The cargoes procured by Portlock and Dixon were valued at nearly 55,000 dollars. The courage and energy of the English gave them great advantage in their dealings with a rude people. Meares wintered, and built a vessel on the coast; and as early as 1786, two ships from Bengal had left at Nootka Sound a gentleman named John M'Kay, who adopted the manners of the people, learned their language, and obtained much useful information.

The torpid indolence of the Spanish government was first disturbed, and its fears awakened, by the approach of the Russians to the Spanish American territories in 1769; they then recollected, that above 160 years before (in 1602), Viscaino had discovered an excellent harbour in 36° 40′ north latitude. As that position was intermediate between the strong holds of Mexico and the limit of the discoveries of the Russians, it appeared advisable to establish themselves there, as on a point of concentration, before they though of pushing their surveys farther to the north. It was resolved, accordingly, to establish a settlement at Monterey, formerly discovered by Viscaino. Vessels were despatched from the port of San Blas under the command of Vincente Vila; but the expedition was productive of no discoveries. It was not till after the most laborious researches, that the Spaniards succeeded in finding again the harbour of Monterey, where, as well as at San Diego, they fixed a colony and returned. But the repeated voyages of the English into the great ocean soon after, caused fresh alarm to the jealous cabinet of Madrid. It appeared that there was no time to be lost in prosecuting discoveries to the north of California, and in making settlements on the coast, or, at least, in formally taking possession of it. In 1775, two ships despatched from San Blas, under the command of Don Juan de Ayala and Antonio Maurelle, contributed in a small degree to the

improvement of geography, by superficially surveying the coast between 47 and 57°. The expedition was instructed to push its survey as far as the parallel of 65°; but Spanish navigators had not advanced so rapidly as those of other nations in the art of maritime surveying, and their examination of the coast extended no further than 57°. A spacious harbour, or sound, in latitude 55° 17′, was named, from the viceroy of Mexico, Puerto Bucarelli. Here Don Juan De Ayala, in the name of his Catholic Majesty, took possession of the country to an indefinite distance.

The result of this voyage appears to have been satisfactory to the viceroy; for, in 1779, he ordered a second expedition to be despatched to continue the examination of the coast from latitude 58° to 70°. As the ignorance of the Spaniards at that time was equal to their silence and reserve, it is possible that the viceroy was not aware that an English navigator, named James Cook, had made this survey the preceding year, with the intention of publishing it to all the world. This expedition, commanded by Don Ignacio Arteaga, accompanied by the pilot Maurelle, made no additions to geography; instead of advancing from the parallel of 58° to 70°, Arteaga terminated his examination of the north-west coast at 59°. He obtained, however, the alarming certainty, that the Russians had fixed themselves permanently at several points in high latitudes. Maurelle, on his return, pretended to construct an accurate chart of the coast, though it is known that, in 1779, the Spaniards still calculated their longitudes from the dead reckoning, while the French and English had, for some years, used chronometers and lunar observations. The Spaniards were so much embarrassed in this last voyage, owing to their ignorance and miscalculations, that when in Prince William's Sound, they imagined themselves on the coast of Kamtschatka, and were in constant fear of being attacked by the Russians.

These impotent attempts of the Spaniards to obtain a knowledge of a coast that was soon after annually

visited by small vessels from Europe, performing the voyage round Cape Horn, sufficiently illustrates the want of all improvement and the relative decline of the Spaniards in the arts of navigation; but when the fur trade began to attract a quantity of English shipping to the north-west coast, the sovereigns of Mexico were urged by new motives to exertion. Two nations, placed at the extremities of Europe and Asia, threatened to contend with them for the treasures of the new world, exerted themselves to dissipate the geographical ignorance which Spain had voluntarily submitted to lest knowledge should create rivals, and seemed gradually to acquire a property on an immense line of coast conterminous with the Spanish possessions. Don Esteban Martinez, made a voyage along the north-west coast in 1788, and discovered no fewer than eight settlements of Russians; he learned also that the governor of Kamtschatka intended to give orders for immediately occupying, in the name of the empress of Russia, Nootka Sound, or, as the Spaniards name it, Puerto de San Lorenzo. The viceroy of Mexico was determined to frustrate this project; and, in 1789, Don Martinez was despatched with two frigates to take formal possession of Nootka Sound. When he arrived there, four vessels were riding in the harbour; two American, one Portuguese, and the fourth an English vessel: the last alone was seized and declared a prize, the other three were released. After this first act of authority, he proceeded without delay to accomplish the object of his mission, by building dwelling-houses and magazines, and by erecting at the mouth of the harbour a battery of cannon. While the Spaniards were thus ardently engaged in laying the foundation of a new dominion, a vessel appeared at the mouth of the harbour. She was suffered to enter it; but her anchor was scarcely let go, when she was boarded and taken possession of by the Spaniards: she proved to be the Argonaut, a trading vessel from London, commanded by captain Colnett, who was duly authorised to form a fixed settlement at Nootka, and was the bearer of an

order for preparing habitations for the English colonists, who were to be conveyed thither in the course of a year, in ships which he left fitting out in the Thames. This violent proceeding on the part of Spain gave rise to warm political discussions between the cabinets of London and Madrid; and two European nations, pretending to civilisation, had nearly engaged in a destructive war for the possession of a small portion of uncultivated coast, at the distance, by sea, of 6,000 leagues from Europe. This succinct history of the fur trade, and of the political disputes to which it conducted, will serve to explain how Europeans became so rapidly acquainted with an intricate and uninviting coast, that half a century before was utterly unknown, and explains the origin of the noblest hydrographical survey ever made.

The British government, amply recompensed for its exertions in the cause of geographical discoveries, by the energy communicated in consequence to commercial enterprise, was preparing to send out an expedition in 1790, to complete the examination of the ocean in southern latitudes, when intelligence reached England of the seizure of the Argonaut. The equipment of the expedition was immediately stopped, and a warlike armament fitted out, to give force to the remonstrances that were about to be made. The sudden appearance of a well armed fleet had its due influence with the court of Spain. Restitution of the property seized was promised, and the right of Great Britain to the possession of Nootka Sound was also acknowledged. From the great importance attached to that post, on account of the fisheries and the fur trade, it was deemed expedient to receive a formal cession of it from the Spaniards; and for this purpose captain Vancouver, who had been appointed second in command in the projected voyage to the antarctic seas, was ordered to proceed to Nootka Sound; and, having received from the Spanish government the restitution of that territory, to survey the whole north-west coast, from lat. 30°, to Cook's river in 61°. He sailed in the Discovery in 1791, accompanied by captain

Broughton, in the Chatham, a small vessel of 135 tons burden,

Vancouver was directed by his instructions to fix his attention chiefly on two objects:—first, on the water communications that might facilitate the commerce between the north-western and north-eastern coasts of America; and, secondly, he was to ascertain the number of settlements made by Europeans on the former of these coasts, and the date of their establishment. He was directed to examine narrowly every inlet, but not to pursue his examination of rivers farther than he found them navigable for ships, that might safely frequent the Pacific Ocean. His attention was particularly called to the Straits of Fuca, and to the opening discovered by the Washington, in 1789. "The discovery," his instructions proceed to say, "of a near communication between any such sea or strait, and any river running into or from the Lake of the Woods, would be particularly useful." Vancouver was enjoined strict courtesy towards traders of foreign nations, whom he might meet with on the north-west coast, and particularly to the Spaniards; and he was desired, if he met with any Spanish navigators, engaged in a service similar to his own, to offer them a free and unreserved communication of all his charts and discoveries. He was instructed to survey on his return the western coast of South America, from lat. 44° to Cape Horn. On his voyage out, Vancouver surveyed a considerable portion of the southern coast of New Holland, where he discovered King George the Third's Sound; at New Zealand, also, he was actively and usefully employed in completing the surveys which Cook had left unfinished. In leaving New Zealand, the Chatham and Discovery were separated by a gale. Vancouver, in the latter ship, discovered some rocky islets, which he named the *Snares*, and afterwards visited a considerable island, which he called *Opara;* but the true name of which is now discovered to be Rapa. In Matavai Bay he rejoined his comrade, captain Broughton, who

had discovered *Chatham Island*, not far to the east of New Zealand.

In April 1792, Vancouver arrived on the coast of New Albion. On approaching Nootka Sound, he fell in with a ship commanded by captain Grey, the same person who was said to have passed through the Straits of Fuca to an extensive sea in 1789; but the American captain disavowed the reports of his navigation which had reached Europe. He penetrated, he said, only fifty miles to the east-south-east, where the strait was still five leagues wide; and the natives told him that it afterwards turned to the northward. Vancouver soon after entered the inlet, and anchored on the first night farther within it than captain Grey, or any other European, had as yet penetrated. In his voyage thus far, he had examined 215 leagues of coast so closely, that he had seen throughout the surf breaking on the shore. On ascending an island in the middle of the inlet, he was enchanted with the prospect that met his eye. In every direction, noble trees were distributed as if in a park; and rose trees in full bloom predominated amongst the brushwood. The country around appeared fertile, opening in some places into large meadows, while in others, especially on the main land, it was a wilderness of lofty trees, among which the oak was most conspicuous. A deer was bought from the natives for a small piece of copper, about a foot square, for they prize this metal above iron. They expressed much horror and disgust at the sight of a venison pasty, and some pains were requisite to convince them that it was not made of human flesh. The promptitude of their suspicion, and the strength of their feelings in this instance, prove that cannibalism, though not practised by themselves, was known by them to exist among some neighbouring tribes. In proceeding to the northward through this inlet, every branch of which he explored, Vancouver met with two small Spanish ships, employed like himself in making a minute survey of the coast. The two commanders immediately united their labours, and even their names, in this part of the survey. The

island which forms the western boundary of the inlet, and on which Nootka is situated, is named *Vancouver and Quadra Island.* The English navigator, however, imposed on the whole archipelago the collective name of New Georgia; and to the wide inlet, which ramifies into a number of inferior harbours, he gave the name of the Gulf of Georgia.

On his arrival at Nootka Sound, difficulties were started by the Spanish commander with respect to the terms of the intended restitution; and Vancouver, sending captain Broughton home in consequence, to acquaint government with the evasive conduct of the Spaniards, proceeded to complete his survey to the southward. The Columbia River was explored, as far as it was navigable for a small vessel. The natives were found, in general, to resemble those of Nootka in dress and manners, though not in language; they have many traits of civilisation; and, in some places, evince a decided taste for architecture. Their houses are well built wooden edifices, the timbers being well mortised and covered with planks twenty feet long, two feet wide, and perfectly smooth; so that when these edifices are considered in relation to the imperfect implements employed to frame them, they must appear wonderful monuments of ingenuity and labour. On the front of these houses is generally painted a human face of great size and hideous features; the mouth, which is represented as open, and forming an oval three feet in height and two in width, being in the door of the habitation. In January 1793, Vancouver proceeded to winter in the Sandwich Islands, bringing with him a stock of live cattle, which he had collected in the Spanish settlements. In the spring of the same year he resumed his survey of the American coast, and returned again to the Sandwich Islands in the winter of 1794. His presence here may have exerted an important influence on the destiny of those Islands, as he was looked up to with peculiar respect by the great Tame-Tame-hah, the extraordinary man who was the immediate instrument of

effecting a great and salutary revolution in the political and social condition of those islands. The islanders had already become acquainted with four European nations; they had learned that there were many others nearly equal to those in power and intelligence; and they perceived, perhaps, that, at no great distance of time, they would become the despised subjects of one of those foreign nations: they preferred, therefore, to place themselves voluntarily under the protection of England. For this purpose, a convocation of chiefs was called, and the cession of Owhyhee to the sovereign of Great Britain was solemnly made, on the 25th of February, 1794. This important event was preceded by long deliberate discussion and was concluded with great formality. The court appeared on the occasion in all its splendour, and dramatic entertainments were exhibited on a great scale.

In the spring of the same year, Vancouver directed his course to the American coast, intending to complete his survey, beginning at the remotest point. On entering Cook's River, he found that it was but an inlet, no stream falling into it which could entitle it to the name it had received. In passing to the south, he met with a fleet of skin canoes, such as he could not have expected to encounter in those seas: there were above 200 of these frail vessels, each carrying two men. The intercourse with Europeans seemed to produce disastrous effects, in the first instance, here as well as in the South Sea islands: the natives were clad in skins of birds and beasts of no value, their comfortable fur garments being all disposed of in trade. At length, on the 22d of August, 1794, the survey of the north-west coast of America was brought to a conclusion; and, in October of the following year, the ships arrived in the Thames, the bad weather and other circumstances having prevented the survey of the western shores of Patagonia. During the four years that the ships were employed in this laborious service, only two men died in both the crews. A circumstance which, if the mortality that attended long voyages while the arts of navigation were

imperfect he considered, reflects the highest credit on the care and skill of the commander. The unceasing exertions which Vancouver himself made to complete the gigantic task of surveying 9,000 miles of unknown and intricate coasts—a labour chiefly performed in open boats—made an inroad on his constitution from which he never recovered; and, declining gradually, he died in May, 1798, before the last volume of his narrative was completely finished for the press. But he may proudly take his place with Drake, Cook, Baffin, Parry, and other British navigators, to whom England looks with pride and geographers with gratitude.

No further knowledge was obtained of the north-west coast of America until 1816. A Russian nobleman of large fortune, count Romanzoff, fitted out the Rurick, a small vessel of 180 tons, for a voyage of discovery, with a crew of twenty men, besides the officers and naturalists. He entrusted her to the command of lieutenant Kotzebue, the son of the celebrated German writer of that name. Kotzebue sailed from Plymouth in October, 1815; and, in March following, touched at Easter Island, where the natives, exasperated by the injuries committed on them by the American traders, resisted his landing. On the 1st of August, 1816, he discovered, on the American shore to the north of Behring's Strait, a wide opening commencing in latitude 66° 42′ 30″, longitude 164° 14′ 50″. He entered this inlet; and, in the course of a fortnight, made a rapid and rather unsatisfactory survey of its shores. He suspected the existence of a passage out of it on the south east, communicating, perhaps, with Norton Sound: another channel seemed to conduct to the west. The naturalists who accompanied him were surprised to find here on the shore an ice-berg, one hundred feet in height, and covered on the summit with a layer of soil and luxuriant vegetation. From a distance it had the appearance of a chalk cliff; at its base lay an accumulation of bones and mammoths' teeth, as Kotzebue calls them; though, from his description, naturalists have concluded them to be the teeth of the

elephant. The inhabitants seemed pretty numerous, and were well clad in furs and skins: they were acquainted, it appears, with tobacco, which they obtained from the Tshuktski. Kotzebue quitted the inlet to which he has given his name, on the 15th of August, and crossed over to visit the coast of Asia: by this imprudent step, he lost the opportunity of making some important discoveries on the northern coast of America. The sea, as far as he could descry, was quite free from ice, and a steady current set to the eastward. He wintered in that archipelago of the Pacific that includes the Nautilus, Chatham, and Calvert Islands. To all these he gave new names, and seems to have regarded them as new discoveries. In the following year, he again sailed to the north, to resume the track which he had so unwisely discontinued the preceding season. In his voyage northward he was met by dreadful gales, and, being thrown, by the pitching of the ship, against a beam with such violence as to break his breast-bone, his health was so seriously affected as to render him incapable of bearing the vicissitudes of a northern climate. His spirit being once sunk, difficulties were not wanting to justify him in abandoning an enterprise to which he felt no longer inclined, and he returned to Europe without making any further attempt to penetrate the polar sea. As no harbour was previously known on the shores of Behring's Strait, the discovery of Kotzebue's Inlet, in which good shelter may be easily found, was of great importance, and the whale fishers were not slow to take advantage of it.

The immense line of coast which Vancouver surveyed, and which Spain was so anxious to appropriate, is now, for the most part, divided between Russia, England, and the United States. The British portion is separated from the American by the river Caledonia, which flows from the Rocky Mountains into Admiralty Inlet, in lat. 48°. Nine degrees farther north commence the Russian territories in America. No colonies have been planted on these shores; but the British

traders from Canada and Hudson's Bay, braving all the hardships of the journey across the continent, have descended into the country from the Rocky Mountains. The natives are a cheerful active race, and friendly to the whites, who supply them with the comforts of life, and give their industry an object. They have encouraged the traders to settle among them. The latter have given the British dominion on this coast the name of *New Caledonia*. They describe it as a fruitful country, well watered with mountain streams, and so abounding in lakes that above one sixth of the surface is under water. The natives call themselves *Ia' Cullies*, or Water Travellers, being accustomed to pass from one village to another in their canoes. The British traders have established in the country a regular chain of forts or posts for carrying on their traffic.

CHAP. XII.

INTERIOR OF NORTH AMERICA.

EAGERNESS OF THE AMERICANS TO ENGAGE IN THE FUR TRADE. — EMIGRATION TOWARDS THE WEST. — DANIEL BOON. — LOUISIANA PURCHASED BY THE UNITED STATES. — EXPEDITION OF LEWIS AND CLARKE. — THEY PROCEED TO ASCEND THE MISSOURI. — THE SIOUX INDIANS. — THE FALLS OF THE MISSOURI. — ITS SOURCES IN THE ROCKY MOUNTAINS. — THE PARTY DESCEND THE COLUMBIA. — DANGERS OF THE VOYAGE. — THEY REACH THE SEA. — WINTER ON THE COAST. — JOURNEY OF PIKE TO THE SOURCES OF THE MISSISSIPPI. — HE PROCEEDS TO EXPLORE THE SOURCES OF THE ARKANSAS AND RED RIVER. — ABUNDANCE OF GAME. — PIKE REACHES THE ROCKY MOUNTAINS. — SUFFERINGS OF HIS PARTY. — HE ENTERS BY MISTAKE THE SPANISH TERRITORY — TAKEN PRISONER. — HIS LIBERATION AND RETURN. — EXPEDITION OF MAJOR LONG. — HE ASCENDS THE PLATTE — THE SANDY DESERTS — JAMES'S PEAK — RETURNS BY THE ARKANSAS AND CANADIAN RIVERS. — THE KASKAIA INDIANS. — JOURNEY OF CASS AND SCHOOLCRAFT — OF LONG AND KEATING. — JOURNEY OF HEARNE TO

THE COPPERMINE RIVER. — HIS UNSUCCESSFUL ATTEMPTS. — HE AT LENGTH REACHES THE SEA. — PROGRESS OF THE FUR TRADERS IN THE INTERIOR. — JOURNEY OF MACKENZIE. — HE DESCENDS THE MACKENZIE RIVER TO ITS MOUTH. — HIS EXPEDITION ACROSS THE ROCKY MOUNTAINS. — HE REACHES THE PACIFIC.

Soon after the British colonies in America had won, by a hard struggle, their political independence, their attention was strongly invited to the lucrative trade carried on for furs on the opposite shores of the continent. Ships from Boston, we have seen, arrived at Nootka Sound, after a perilous voyage of a whole year, to procure a cargo of furs. The infant republic was at first too much engrossed in making those arrangements required by the novelty of its political existence, and had a population too feeble in proportion to the vast extent of territory which it claimed, to think of stretching its dominion as far as the Pacific Ocean; but the course of political events suggested and fostered this ambition. The vast and fertile country of Louisiana, on the western bank of the Mississippi, had been ceded by Spain to the crown of France in 1763, and being deemed perhaps, by Napoleon, a useless possession, was sold by him to the United States, in 1804, for the sum of 6,000,000 francs. The Americans lost no time in surveying their new acquisitions, and in examining their productions, their capabilities, and their boundaries.

A tide of emigration had long before flowed to the westward: a predilection for the roving life of a hunter, and for the solitude of the woods, had induced many in the remote settlements of America, to retire as civilisation advanced, and thus to pilot the way, as it were, for those who explored the country with motives of a less unsocial character. The celebrated Daniel Boon, who led the first colony into Kentucky, having lived some time with the Indians, by whom he was taken captive, imbibed a strong partiality for their mode of life; and as colonisation advanced to the westward, he con-

tinually shifted his residence, so as to be always 100 miles ahead of the white population; the hut in which he was found dead, a few years ago, was removed some distance from the farthest settlements of the Missouri.

The first great national expedition undertaken by the citizens of the United States was planned by president Jefferson, a zealous promoter of interior discovery. Captain Meriwether Lewis and lieut. William Clarke were appointed to command the exploring party, which consisted in all of about thirty persons. They were instructed to ascend the Missouri to its source, and then, seeking a passage through the western mountains, to endeavour to descend by the Columbia, or great river of the west, to the Pacific Ocean. On the 14th of May, 1804, they embarked on the Wood River, a small stream which falls into the Mississippi, nearly opposite to the mouth of the Missouri, and began the longest river voyage that has ever been undertaken since the time of Orellana. Nor had the fictions of an ignorant age yet fallen into such discredit, as to relieve them from the fear of meeting with powerful savage nations, of gigantic stature, and particularly hostile to white men. Nearly 100 miles up the Missouri, they passed a little village named La Charette, the highest white settlement on this river. Among all the Indian tribes in this country, the Osages, the Sioux, and the Mahas, they observed unequivocal proofs of decline and increasing misery. A tribe of the last named nation were worked into such a state of frenzy by the ravages of the small-pox, that they burned their villages, destroyed their wives and children, and sallied forth to seek an abode in some distant country.

On the banks of the Missouri a rock was pointed out to our travellers which was an object of peculiar regard in the eyes of the natives. They procure from it the red stone of which they make their pipes; and the neighbourhood of this rock is a sort of neutral or sacred ground, where, in the midst of the most furious wars, every one may seek unmolested the material for his pipe. When the party had advanced about 60 or 100

miles up the Missouri, the cold winds from the north-west, and the formation of new ice on the river, warned them of the necessity of speedily selecting their winter quarters; they accordingly built a fort, which they called Fort Mandan, from the Indian people in whose country they were. These Indians may be said to worship the healing power; they believe in the existence of a great spirit, whom they call the Great Medicine; and the genius or guardian angel of each individual is called his Medicine. The tradition which these people have respecting their origin is singular enough: they believe that their whole nation resided originally in a large village under ground, near a subterranean lake; the roots of a vine grew down to this village, and afforded them a glimpse of ethereal light. Some adventurers climbed up by the roots, and brought back so good a report of buffaloes and fruit, and so tempting a sample of grapes, that the whole nation resolved to emigrate to the upper and more agreeable region. Men, women, and children accordingly began to ascend, but when only half their number had reached the surface, the vine broke under the weight of a corpulent woman, and the ascent was closed upon her and the rest of the nation. They expect to return, after death, to this their original seat under ground; but a great lake is to be crossed before they reach the village of their fathers, and the wicked, because of the burden of their sins, will be unable to effect their passage. They pay an annual visit to a fragment of rock or medicine stone, which they regard as an oracle. Their chiefs smoke before it with much solemn gravity, and then retire to sleep in a neighbouring wood; in the morning the decrees of fate are seen written on the rock in mysterious white marks.

On the 7th of April the party left the encampment at Fort Mandan, and proceeded to ascend the Missouri. They soon after passed the mouth of the Yellow Stone River, little inferior in magnitude to the great river into which it falls: here the quantity of game is prodigious.

Buffaloes were seen in herds of from 3000 to 10,000. They were soon after embarrassed on finding the river separate into two branches of nearly equal size. A detachment, lightly equipped, was sent forward to seek those great cataracts which were known to distinguish the main branch of the Missouri. Captain Lewis himself, on ascending the southern branch, obtained a distant view of the Rocky Mountains, now completely covered with snow; and, guided by the tremendous sound, arrived at the spot where the whole Missouri descends down a shelving rock, and continues to form for some miles a succession of rapids and foaming cascades. The whole party accordingly proceeded up this branch, and, embarking in canoes above the grand cataract, continued their course to the Rocky Mountains. Here the river winds through a defile three or four miles long, the rocks rising perpendicularly from the water's edge. The Americans followed the stream in the mountain valleys, until, after pursuing its course for 3000 miles, they arrived at its fountain head. The three streams, which may be regarded as its sources, they named from their great statesmen, Jefferson, Madison and Gallatin; and, by way of reflecting a compliment on these gentlemen, they gave two other tributaries the names of Philosophy and Philanthropy Rivers.

The expedition now joyfully proceeded towards the west, and soon commenced their descent towards the Pacific Ocean. They brought with them as an interpreter a Shoshonee woman, who had been carried off from this country by a band of Indians from the east, in the hope that by her mediation they might be able at once to establish a friendly intercourse with the natives; nor were their hopes disappointed. They met a troop of warriors, armed and on horseback, preparing to resist a hostile attack; they at first manifested mistrust and suspicion of the whites, but when the Shoshonee woman was brought into the tent to interpret between the parties, she instantly recognised her brother in the Indian chief himself, and was for some time unable to

speak from the violence of her emotions. The confidence and friendship of the Indians were now completely gained, but this did not prevent the party from feeling severely the want of provisions. They were obliged even to kill their horses, lean as they were, to afford them a few meals, and devoured as many dogs as they could purchase from the natives. These, better able to endure privations, or less used to feed on quadrupeds, bestowed on the strangers the opprobrious name of dog-eaters.

The Americans were now embarked on the Oregan, or Great River of the West, to which, with little reason, the name of Columbia has been given. As they descended to the sea, the inhabitants seemed to improve in mildness of manners and habits of settled industry. The Sokulks live in houses made of mat, and are well supplied with fishing implements, by which they procure themselves an abundant subsistence. The navigation of the Columbia presented many dangers, which our travellers averted by their skill and firmness; their hardihood excited the wonder and admiration of the natives. As they approached the sea, the river widened till it attained a breadth of two miles, and sometimes expanded into wide lakes filled with islands. On the 2d of November they perceived the first tide water; soon after, they had the pleasure of hearing a native uttering a few words of English, which he had learned from the traders who frequent the coast. On the 7th, as the fog cleared off, they were delighted with a view of the ocean; but they found themselves now in a dangerous and distressing situation: their canoes were ill fitted for sea navigation, and they drifted for some time at the mercy of the waves, in the severest weather, ill clothed, and with scanty provisions; but at length they reached the open coast, where they selected a suitable spot for their winter encampment. Here they established a friendly intercourse with the Clatsops, Killamucks, and other Indian tribes of whom they formed a favourable opinion, and returned to Fort Louis on the Mississippi in May, 1806.

Lewis and Clarke were the first who travelled across the continent of North America, from the United States to the Pacific Ocean; but the enterprise had been projected many years before by Jonathan Carver, who had travelled to the sources of the Mississippi, and who intended to seek the Oregan, or Great River of the West, by which he might descend to the Pacific Ocean. "The completion of the scheme," he says, "which I have had the honour of first planning and attempting, will some time or other be effected, I make no doubt; those who are so fortunate as to succeed in it will reap, exclusive of the national advantages that must ensue, emoluments beyond their most sanguine expectations; and whilst their spirits are elated by success, perhaps they may bestow some commendations and blessings on the person that first pointed out to them the way; these, though but a shadowy recompense for all my toil, I shall receive with pleasure."

While Lewis and Clarke were accomplishing what Carver here points out, an enterprising young officer, lieutenant Zabulon Montgomery Pike, was sent by the American government to examine the sources of the Mississippi, and to conciliate the friendship of the Indian nations inhabiting that country. He was hospitably entertained by the Sioux Indians, and their chief presented to him the sacred pipe, which was to serve him as a letter of recommendation, and entitle him to the favour and protection of the kindred tribes. He was delighted, as he advanced, with the romantic beauty of the country on the banks of the upper Mississippi; he passed the mouth of the Chippeway, a majestic river flowing into the Mississippi from the east, and of the St. Peter's, a still nobler stream, which joins it from the west. Beyond this the navigation of the river was obstructed by a series of rapids, terminating in the great falls of St. Antony. When Mr. Pike and his party had advanced 230 miles above the falls, in lat. 45°, they were obliged to leave their canoes and continue their journey on sledges. It was now the depth of winter,

and they suffered as much from the scarcity of food as from the severity of the weather. They still followed, however, the course of the Mississippi, which was now dwindling into a small stream, about 300 yards wide, flowing through a level country. In February they arrived at Leech Lake, which appeared to be the main source of the river; and here they were hospitably entertained at a station of the British fur traders from Montreal. Having also visited Red Cedar Lake, which likewise contributes its waters to the Mississippi, Mr. Pike returned in April to Fort Louis, after a laborious journey of nearly nine months.

Scarcely had he returned, when lieutenant (now major) Pike was appointed to command an expedition, the object of which was to survey the wide extent of country between the Mississippi and the western mountains, and to examine the sources of the Arkansas and the Red River. His party consisted of twenty-three persons, including a surgeon and interpreter. The journey commenced through a rich and beautiful country, on the banks of the Osage River, where the Indians seemed to enjoy greater abundance than often falls to the lot of those children of nature. The country on the Arkansas appeared to them the hunter's paradise; the elk, deer, and buffalo ranged over the plains in such immense herds as might suffice the whole Indian race for a century. The Arkansas is navigable in boats throughout its whole length, from the Mississippi to the mountains, a distance of nearly 2000 miles, except during a few months of the dry season, when it is obstructed by sand-bars. Winter had arrived before major Pike reached the head of the Arkansas; he had not taken into consideration the elevation of the ground, and the hardships to be endured in visiting the mountains during the most inclement season; he persevered, however, in his attempts to reach a lofty peak, the snowy summits of which were visible from the plains at the distance of 100 miles. Little game was to be procured; the party, on one occasion, passed four days without tasting a meal; and some,

having their feet frozen, were unable to proceed. Major Pike, however, persisted till he reached the head of the Arkansas, 190 miles above its issue from the mountains. He then directed his course southwards, and in a few days arrived at the banks of a large river, which he supposed to be the Red River, along which it was his intention to return. The stream at which he had arrived, however, was the Rio del Norte, which flows through the Spanish territory into the Gulf of Mexico: he thus unconsciously advanced within the dominions of a people peculiarly jealous of encroachment. He soon discovered his mistake. A party of Spanish soldiers surrounded the Americans, and led them prisoners to Santa Fé: here, from the raggedness of their garments, their want of hats, and their wretched appearance, they were generally mistaken for savages. The suspicions of the Spanish commander being dispelled, the travellers were allowed to depart, and arrived at Nachitoches on the 1st of July.

The American government appears to have rested satisfied for some years with the result of these expeditions. Journeys, indeed, were made to the sea, across the Rocky Mountains, by private traders; but from these the public derived very little information. An expedition to the mouth of the Columbia was undertaken, in 1811, by Mr. Hunt; and some of his party, on their return from the Pacific, crossed the Rocky Mountains to one of the sources of the Platte, by which they descended to the Missouri through a tract of country before unexplored. In the following year, Mr. Robert Stewart, with four other traders, left the Pacific for New York. In crossing the Rocky Mountains, they were robbed by a party of the Crow Indians, who carried off all their horses. They now found themselves on foot, with the Rocky Mountains and a journey of 2000 miles before them; the greater part of which was through a country wholly unknown, as their route lay considerably to the south of that followed by Lewis and Clarke. Having crossed the mountains with much labour, they travelled east-south-east until

they struck on the head waters of the great river Platte, which they followed to its mouth; having spent the winter upon it, 600 miles above the Missouri.

At length, in 1819, the American government organised a new expedition, "of a military and scientific nature, to examine more carefully, with a view to colonisation and defence, their extensive dominions to the east of the Rocky Mountains." It was commanded by major Long. The narrative of it has been written by Dr. James the botanist. The party embarked in a steam-boat at Pittsburg, on the 5th of May, 1819, and on the 30th reached the Mississippi. About the middle of September the steam-boat arrived at the confluence of the Platte and Missouri, and on the banks of the latter river they erected encampments for their winter residence, which they named Engineer Cantonment. Here they suffered dreadfully during the winter from the scurvy: and as they had no means of checking the disease, for which they were wholly unprepared, nearly 100 soldiers, about one third of the party, were carried off.

On the 6th of June, the party left their winter quarters to proceed up the valley of the Platte, which presented to the view, for more than 100 miles along the river, a vast expanse of prairie or natural meadow, without a hill or other inequality of surface, with scarcely a tree or shrub to be seen upon it. Vast herds of bisons and deer, in the rear of which packs of wolves are sure to follow, rove over these immense plains. The wild movements of these animals, with the rare and interesting plants, relieve in some measure the dulness of this monotonous scenery. The prairies on the Platte are succeeded by the great sandy desert, which extends in a gentle slope nearly 400 miles to the very base of the Rocky Mountains, and nearly 500 miles from north to south. Its surface is furrowed by deep ravines, to the depth of many hundred feet below the common level. In these the scanty growth of stunted trees skirt the brooks that meander along the bottom, but on the elevated surface of the great desert not a tree is to be found. The

formidable cactus, thickly beset with terrific spines, forbids the approach of man or beast.

At length the party reached the base of the Rocky Mountains, and a detachment proceeded to ascend a peak which towered to a considerable height above the remainder of the chain. Dr. James, whose name has been given to this peak, speaks in admiration of the astonishingly brilliant colouring of the plants which he found here. This he ascribes to the intensity of the light transmitted from the bright unobscured atmosphere of those regions, and increased by reflection from the immense impending masses of snow. "From the summit of the peak," he proceeds, "the view towards the north-west and south-west is diversified with innumerable mountains, all white with snow, and on some of the more distant it appears to extend down to their bases. Immediately under our feet, on the west, lay the narrow valley of the Arkansas, which we could trace running towards the north-west, probably more than sixty miles. On the north side of the peak was an immense mass of snow and ice. To the east lay the great plain, rising as it receded, until in the distant horizon it appeared to mingle with the sky." The altitude of this peak was determined by trigonometrical measurement to be about 8500 feet from its base, which was probably about 3000 feet above the level of the sea.

The party now proceeded southward till they reached the Arkansas, the sources of which they explored. A detachment sent to the south descended the Canadian, which they mistook for the Red River, and were thus conducted back to the Arkansas, where they rejoined their companions. Both parties suffered much from stormy weather, from want of provisions, and particularly of water, that of the rivers being generally either muddy or brackish. Naked beds of sand occupied the greater part of the country round the upper Arkansas, and were often covered by an incrustation of salt like thin ice. In these deserts the thermometer in the month of August stood at from 95° to 100°, in the shade. Clouds of locusts

filled the air, rattle-snakes of various kinds, and enormous scolopendras, crawled from the chasms in the parched ground. The torment of musquitoes was not felt, but their place was supplied by the more formidable wood-ticks, which bury themselves in the skin, and cause an irritation which is often attended with disagreeable consequences. The detachment that descended the Canadian fell in with a band of the Kaskaias Indians, who occupy the country about the sources of the Platte, Arkansas, and the Rio del Norte. They appeared to our travellers to be the most degraded and miserable of the uncivilised tribes on the eastern sides of the Rocky Mountains. Their wandering life, and the inhospitable nature of the country, precludes the possibility of their advancing beyond the profoundest barbarism. They are, however, very expert horsemen, and very dexterous in catching wild horses by throwing the noose. The different exploring detachments having rendezvoused at Port Smith, on the Mississippi, proceeded to Washington, bringing with them, as the fruits of their travels, the skins of many rare animals, some thousand preserved insects, and an herbal of 400 or 500 new plants.

In the mean time another expedition had proceeded to survey the country on the British frontier, round the sources of the Mississippi. Mr. Schoolcraft was the historian of this expedition, which was commanded by general Cass. They followed the route which Pike had previously explored, but which they were expected to survey with more scientific eyes. To complete the survey of the frontiers, major Long and Mr. Keating were directed to ascend the St. Peter's, a considerable river, which falls into the Mississippi from the west, nearly in lat. 45°. This river had been formerly ascended by Carver, and still earlier by baron La Hontan; but the Indian tribes inhabiting its banks still remained nearly strangers to the citizens of the United States. Long and Keating traced the river to its source, a distance of 375 miles, and, proceeding northward a few miles, arrived at the Red River, which flows northwards from

the British territories into Lake Winnipeg. The labours of this expedition completed the general survey of the vast territories of the United States.

The immense extent of country stretching northward from Lake Superior and the sources of the Mississippi remains still but very imperfectly known. Its leading features, however, its chains of lakes and navigable rivers, were very soon discovered by the enterprise of the British fur traders. As early as 1715, the Hudson's Bay Company had received from the Indians tolerably distinct accounts of a river flowing to the north into the sea, on the banks of which were situated mines of copper. The intention of the company to explore this river and its mineral riches was decided in 1768, when rich specimens of copper ore were brought to Fort Prince of Wales by the trading Indians. For this laborious undertaking they selected Samuel Hearne, who had given proofs of his zeal and ability in examining the northern coast of Hudson's Bay and in improving the fishery. He set out from the fort on the 6th of November, 1769, accompanied by two whites and some Indians. The ground was rugged, though covered with snow. Provisions soon began to fail. When he had advanced about 200 miles, his Indian guides abandoned him, and he was obliged to return. He was not discouraged, however, by this failure; but in the beginning of February, 1770, he again proceeded, taking with him five Indians, but no Europeans; who, he found, were viewed with contempt by the natives, from their inability to bear the hardships of the journey. When he had advanced about 500 miles into the interior, he found it necessary to wait till the severity of the season relaxed. Great distress was felt in the mean time for want of provisions. "It was," he says, "either all feasting or all famine: sometimes we had too much; seldom just enough; frequently too little; and often none at all. It would be only necessary to say, that we have fasted many times two whole days and nights; twice upwards of three days, and once near

seven days, during which we tasted not a mouthful of any thing, except a few cranberries, water, scraps of old leather, and burnt bones." Towards the end of April he again set forward; and in August, when in lat. 63° 10′ north, and about 10° 40′ west long. from Churchill River, he was preparing to spend the winter among a friendly tribe of Indians, when a gust of wind threw down his quadrant, which was broken to pieces, and he determined to return.

Undismayed by all these hardships and disappointments, Hearne again set out on the 7th of December, in search of the Coppermine River, in company with an intelligent Indian named Motannabbi. He followed this time a more westerly course; and when in lat. 60°, above 600 miles from the fort, they built canoes, and proceeded by various lakes and streams in a more northerly course. On the 13th of July, 1771, the party much increased by the accession of straggling bands of Indians, arrived at the Coppermine River. The Indians had for some weeks meditated an attack on the Esquimaux, with whom they live in perpetual hostility. About one o'clock in the morning of the 17th, they commenced the attack. "Finding," says Hearne, "all the Esquimaux quiet in their tents, they rushed forth from their ambuscade, and fell on the poor unsuspecting creatures, unperceived till close to the eaves of their tents, when they soon began the bloody massacre, while I stood neuter in the rear." The little horde, thus cruelly butchered consisted of about twenty persons, men, women, and children. An old woman found fishing in a neighbouring stream was tortured and put to death with the most shocking barbarity. A few of the Esquimaux escaped; but the Indians destroyed their tents, broke their stone vessels, carried away their provisions, and then, collecting on the top of a little hill, shouted in triumph to the poor wretches who had taken refuge in the river below. After this shocking carnage, "we sat down," says Hearne, "and made a good meal of fresh salmon."

On the morning of the 17th, Hearne commenced his survey of the mouth of the river. The tide was then out, but from the marks on the shore it appeared to flow about twelve or fourteen feet. The water in the river was quite fresh; but from the number of seals which he saw on the ice, and from the quantity of whalebone found in the tents of the Esquimaux, Hearne concluded that the expanse of water before him was the sea. It appeared to be full of islands and shoals, as far as he could discern with the assistance of a good telescope. On the last day of June, 1772, he arrived at Fort Prince of Wales, after an absence of a year and nearly five months. Three years later he was made governor of the establishment. In 1782, Fort Prince of Wales was taken by a French squadron, commanded by La Perouse. This generous and enlightened commander restored to Hearne the manuscripts of his journal, on condition that it should be published immediately on his arrival in England. This took place in 1787; but yet, for what reason it is not known, the publication was deferred till 1795. To this long delay may, perhaps, be ascribed the omission of many important details in the narrative of his journey. He does not mention the latitude of the mouth of the river, which in the chart which accompanies his volume is placed in about 73° 30′, or 6° too far to the north. This geographical inaccuracy, with others of a similar description, long threw some discredit on the whole narrative, and induced many to doubt whether Hearne had actually reached the sea.

Previous to the year 1775, the great chain of lakes which runs towards the north-west from Lake Superior to the Polar Sea, and forms the great receptacle of the waters from the Rocky Mountains, was still wholly unknown. In that year, Mr. Joseph Frobisher, a gentleman engaged in the fur trade, undertook to penetrate into the country yet unexplored to the westward; and he succeeded in advancing a considerable distance on the Missinipi, or Churchill River, where he procured as

many furs as his canoes could carry. In this perilous expedition he sustained all the hardships incident to a journey through a wild and savage country, where his subsistence depended upon what the woods and waters produced. These difficulties, however, did not discourage him from returning the following year, when he was equally successful. His brother then succeeded in reaching Lake de la Croix, still farther to the west. In 1778, Mr. Pond followed the track of Mr. Frobisher, and proceeding still farther, at length arrived at Athabasca, a country hitherto unknown but from Indian report. The traders having thus reached that chain of internal waters which affords an almost continuous navigation from the Canadian lakes to the sea, began to proceed much more rapidly in their discoveries; and it was not long before they received intelligence of a great river flowing to the northward.

To explore this river, to which he has given his name, Mr. Alexander Mackenzie set forward on the 3d of June, 1789. He commenced his journey from Fort Chepeweyan, on the south side of the Lake of the Hills, attended by a party of Canadians and some Indians, one of whom had been with Hearne. In descending the river, when in lat. 67° 45′, he learned from the tribe of Indians called the *Deguthee-Dinees*, or *Quarrellers*, that the distance overland to the sea on the east side was not great; and that to the westward it was still shorter. On the 12th of July they entered a lake as it appeared, though no land was seen ahead, but the water was shallow, and covered by ice. "At a few leagues from the mouth of the river, my people," says Mackenzie, "could not, at this time, refrain from expressions of real concern that they were obliged to return without reaching the sea." From this it appears that the author was at first disposed to doubt that he had actually reached the ocean; but soon after he observed a rising of the water, which, as the wind was moderate, was believed by all to proceed from the tide. He ascertained this rise to be about eighteen inches. It

is, possible that the freshness of the water may have caused him some embarrassment; but after he saw several whales sporting among the ice, he was at length disposed to believe that he had actually reached the sea. He determined the latitude of the island on which they encamped, and which he called *Whale Island*, to be 69° 14′. The expedition returned without any accident to Fort Chepeweyan, on the 12th of September, 1789. The narrative of Mackenzie, as well as that of Hearne, was long regarded with mistrust, and his assertion that he had arrived at the sea was generally discredited; but the result of the recent expeditions has fully vindicated the character, and proved the extreme accuracy, of that intelligent traveller.

In 1792 Mackenzie again set forth to prosecute discoveries to the westward. He ascended the Peace River, which flows from the Rocky Mountains; and in the spring of 1793, having made his way with much difficulty across this rugged chain, he embarked on a river called the *Tacoutche Tesse*, running towards the south-west. Besides the hardships which necessarily attend a journey through a wild, mountainous, and unknown country, he had to endure continual vexation from the ignorance, obstinacy, and timidity of his Indian guides. At length, in June, he arrived among a tribe of Indians, who informed him that the river ran towards the south, and at its mouth, as they had been informed, white people were building houses. They represented their neighbours as a very malignant race, living in subterraneous recesses, and possessing iron arms and utensils, which they procured in the course of trade from white people who brought them in great canoes. After overcoming numberless difficulties, by his perseverance, and the abundant resources of his ingenuity, our traveller arrived at the mouth of the river, the situation of which he determined with much exactness. This river meets the sea immediately to the south of the Prince of Wales's Islands. On the face of a rock he inscribed in large characters, with a mixture of vermilion and grease, "Alexander Mac-

kenzie, from Canada by land, the 22d of July, 1793." Our adventurous traveller returned by the same route, and arrived at Fort Chepeweyan on the 24th of August.

CHAP. XIII.

ROSS AND PARRY.

VOYAGE OF CAPTAIN ROSS TO BAFFIN'S BAY. — ICEBERGS. — ERRORS IN THE CHARTS. — NORTHERN ESQUIMAUX. — THEY POSSESS IRON. — RED SNOW. — NORTHERN SHORE OF BAFFIN'S BAY. — CLEAR SEA WEST OF THE ICE. — SIR JAMES LANCASTER'S SOUND. — ROSS DOES NOT EXPLORE IT. — RETURNS HOME. — GENERAL DISAPPOINTMENT AT THE RESULT OF HIS VOYAGE. — EXPEDITION OF CAPTAIN PARRY. — HE PROCEEDS UP LANCASTER'S SOUND. — PRINCE REGENT'S INLET. — THE MAGNETIC NEEDLE SINGULARLY AFFECTED. — THE SHIPS PROCEED WESTWARD IN BARROW'S STRAIT — THEY REACH THE MERIDIAN OF 110°. — WINTER HARBOUR IN MELVILLE ISLAND. — INTENSITY OF THE COLD. — PHENOMENA RESULTING FROM IT. — WINTER AMUSEMENTS. — NORTH GEORGIAN GAZETTE. — EXCURSION ACROSS MELVILLE ISLAND. — BREAKING UP OF THE ICE. — INEFFECTUAL ATTEMPTS TO PROCEED FARTHER WESTWARD. — THE AURORA BOREALIS. — SUPPOSED SITUATION OF THE MAGNETIC POLE. — RETURN OF THE EXPEDITION.

THE discovery of a north-west passage had been always a favourite object with the British nation; and the voyages to which it gave birth, such as those of Frobisher, Davis, Baffin, Hudson, and others, exhibiting as they do incontestable proofs of perseverance and great nautical skill operating with slender means, reflect, perhaps, more credit on those who undertook them, than many voyages which were attended with brilliant discoveries. When the late war was at an end, and the British government had time to employ some portion of its marine in the labours of peace, it was determined to send an expedition to explore Baffin's Bay, in the hope that the examination of the shores of that great sea might detect the long-wished for north-west passage. For this purpose the Isabella and the Alexander were

fitted out, and placed under the command of captain Ross, an officer well experienced in the navigation of northern seas: the Alexander was commanded by lieutenant Parry, a young officer whose name has since become honourably associated with north-western discoveries.

The ships put to sea on the 18th of April, 1818. On their arrival on the western coast of Greenland they found the ice abundant; and the governor of one of the Danish settlements told them, that for some years he had found that the winters were growing uniformly more severe. From observations made at the Island of Wygat, it appeared that this coast was erroneously laid down in all the charts; the error in longitude in those of the admiralty amounting to more than 5°.

In lat. 75° 54′, when the ships had passed what was hitherto deemed the inhabited part of Greenland, a party of Esquimaux were seen approaching the ship over the ice. With some difficulty they were brought to a parley with the strangers. Though separated from the Greenlanders by a distance not exceeding two degrees, they were still ignorant that there were any human inhabitants on the earth besides themselves. They could hardly be brought to touch the English, whom they regarded at first as supernatural beings. One of them addressed the ship with much solemnity: "Who are you, whence come you? is it from the sun or the moon?" This people, who, from their ignorance of the canoe, might be inferred to want some of the arts and comforts of other Esquimaux tribes, yet had the singular advantage of being acquainted with iron, of which they had contrived to fashion themselves knives. They explained that they found this valuable metal in a mountain composed entirely of it, and then, breaking off small fragments, they hammered it with stones. From the appearance of the metal, and its analysis, it has been conjectured to be meteoric iron, and the iron mountain intimated by the natives has perhaps no other existence than what it owes to the error of the interpreter, and is to be understood merely as a large mass. To this tribe, the ugliest of the

Esquimaux race, captain Ross gave the name of the *Arctic Highlanders*.

A little farther on, our voyagers saw cliffs covered with snow of a deep red colour; when thawed, it had the appearance of muddy port wine. Red snow had been frequently seen before, and observed by skilful naturalists in the Alps and Pyrennees; but how it obtained the colour had never been satisfactorily explained. Red snow from Baffin's Bay was brought home, and submitted to the examination of naturalists and chemists: some pronounced that the colouring matter was of an animal, others of a vegetable, nature; but the question seems now decided in favour of the latter opinion, an extremely minute lichen being supposed to vegetate even upon snow.

Captain Ross, though an experienced commander, appears to have been deficient in the confident hope and ardour which are requisite qualifications in those who conduct voyages of discovery. He seems to have felt little interest in the solution of geographical problems, and his indifference towards the object of the expedition frustrated its intentions. He passed by Wolstenholm Sound and Whale Sound without deigning to examine them; the great inlet on the northern coast of Baffin's Bay, which Baffin named Sir Thomas Smith's Sound, was passed at so great a distance as to be barely discernible. But the carelessness with which he examined those interesting shores was not the only fault of which captain Ross was guilty; interposing his private belief where enquiry ought to have decided the question, he pronounced those inlets to be only bays, the terminations of which he asserted, on his single authority, to be visible.

On descending the western shore of Baffin's Bay, toward the south, a great change was observed; the sea was clear of ice, and extremely deep; its temperature was increased, the land was high, and the mountains, in general, free from snow. A noble inlet, nearly fifty miles wide, with high land on both sides, now offered itself to view. Into this the ships entered on the 29th

of August; but they had not advanced above thirty miles within it, when, to the amazement of all his officers, captain Ross made a signal to tack about and return. In explanation of this manœuvre, he affirmed that he saw land stretching across the inlet, at a distance of eight leagues. To the imaginary range of hills which thus seemed to prevent his progress to the west, he gave the name of *Croker's Mountains*. His officers, who felt confident that this great inlet, now recognised as the Sir James Lancaster's Sound of Baffin, was a strait communicating with the open sea to the westward, were no less mortified than surprised on finding that their commander was about to leave it without any farther investigation. Proceeding to the southward, along a coast of which but little was known, the commander continued to show the same indifference to add to the stock of geographical information. The ships held their course at such a distance from land, that the shore was seen but imperfectly, and never examined. On the 1st of October they had arrived at the entrance of Cumberland Strait, where much still remained to be done by a commander panting for discovery; but captain Ross directed his course homeward, and arrived in England without any accident.

The failure of captain Ross, so far from disheartening the advocates of a north-west passage, added new particulars in favour of their views: it confirmed the authenticity of Baffin's third voyage; for the old charts of Baffin's Bay, which were evidently derived from that navigator, approached too near the truth to be the works of imagination. It even proved the existence of those numerous inlets, towards the west, which Baffin thought fit to name sounds. The great depth of the sea in those inlets, and the high temperature of the water, showed that they were something more than mere gulfs.

The government, feeling the force of these arguments, fitted out two ships, the Hecla bomb and Griper gun-brig, to recommence the examination of those seas.

Lieutenant Parry, who had sailed with captain Ross, but who dissented from him as to the impracticability of the north-west passage, was appointed to command the expedition. The ships sailed from the river on the 5th of May, 1819; and on the 15th of June, Cape Farewell, the southern point of Greenland, was descried at a distance of more than forty leagues. The day after they fell in with a stream of ice and several icebergs. As they advanced northwards up Davis's Strait and Baffin's Bay, the ice on the westward presented a continuous barrier, through which it was found impossible to force a way. After many ineffectual attempts of this kind, the ships reached the latitude of 73°, when captain Parry, being unwilling to pass the latitude of sir James Lancaster's Sound, resolved to make another effort to penetrate the ice which occupied the middle of this inland sea. This was accomplished in seven days, the ships being worked in that time through an accumulation of ice about eighty miles in breadth.

As soon as the western side of this barrier was gained, our navigators were greeted by some favourable appearances; the sea was deep, no bottom could be found with 310 fathoms of line; the swell of the ocean was also perceptible. The temperature of the water had risen about six degrees, and no ice was to be seen. They found themselves also in the great resort of whales, above eighty large ones being reckoned in the course of a day.

On the 31st of July our navigators visited the spot in Possession Bay, where they had landed the preceding year. They found the flag-staff still standing, and the traces of their feet in some places were so strongly marked as to lead to the conclusion that very little snow or sleet could have fallen since their last visit. They were now about to enter that great inlet or sound to which their instructions had principally directed their attention. The hope of finding a north-west passage rested chiefly on their success in this part of their mission. They crowded all sail, while a fresh easterly breeze carried them rapidly to the westward. "It is more easy

to imagine than describe," says captain Parry, "the almost breathless anxiety which was now visible in every countenance, while, as the breeze increased to a fresh gale, we ran quickly up the sound. The mast-heads were crowded by the officers and men during the whole afternoon; and an unconcerned observer, if any could have been unconcerned on such an occasion, would have been amused by the eagerness with which the various reports from the crow's nest were received: all, however, hitherto favourable to our most sanguine hopes." Before night they had passed the limits explored in the last voyage, and yet could discern no land in the direction of their progress. They had reached the longitude of 83° 12′; and the two shores of the passage, as far as could be discerned, were observed to continue full fifty miles asunder. Thus the expedition proceeded rapidly to the westward. The sea was deep, had the colour of the ocean, with a long swell rolling from the south and east, and was perfectly free from ice. Our navigators began to flatter themselves that they had actually reached the Polar Sea; but their joy received some check from discovering land ahead. This proved to be only a small island; but the ice stretching between it and the northern shore, disturbed their hopes of proceeding to the west.

To the south a broad inlet, ten leagues wide, seemed deserving of being explored. Our navigators entered it, expecting to find a clearer channel to the westward. They had hitherto observed that, from the moment they had entered Sir James Lancaster's Sound, the sluggish movement of the compass cards, and the irregularity occasioned by the attraction of the ships' iron had uniformly increased as they proceeded westward; but in descending this inlet the compass actually lost the power of motion; and they saw for the first time "the curious phenomenon of the directive power of the needle becoming so weak as to be completely overcome by the attraction of the ship; so that the needle might now be properly said to point to the north pole of the ship."

The inlet in which they were proceeding, opened out

as they advanced southward; and as the western side continually receded towards the south-west, their hopes of reaching the open sea in that direction increased: but where the land seemed to terminate in that direction, a barrier of ice prevented the further progress of the ships; however, no land was seen which could induce our navigators to doubt the practicability of proceeding much farther to the south-west, whenever openings in the ice would permit it. The ships had proceeded down this inlet about 120 miles from its mouth. On their return to *Barrow's Strait*, as they named the great inlet of which Lancaster Sound is the mouth, the sea, which a few days before had been covered with ice, was now found perfectly free. They continued, therefore, to advance to the westward, though not with rapidity, owing to the lightness of the winds. On the 22d, in long. 92¼°, an opening eight leagues in width was seen to the north. In looking up this inlet, which was named *Wellington Channel*, neither land nor ice could be seen from the mast-head. The appearance of this opening, as it convinced our navigators that they were among islands, intersected by numerous channels, encouraged their hopes that they had actually reached the Polar Sea.

On advancing a little farther their difficulties increased. The passage was studded with small islands, the water was shoal, the ice more troublesome, and fogs frequent. They still, however, continued to proceed to the westward along the shore of a large island named *Bathurst Island*. A party landed here, and found the remains of some Esquimaux habitations. Recent traces of the reindeer and musk ox were seen in many spots. The magnetic observations made here, compared with those made in Prince Regent's Inlet, "led to the conclusion," says captain Sabine, "that we had, in sailing over the space included between those two meridians, crossed immediately to the northward of the magnetic pole, and had undoubtedly passed over one of those spots upon the globe where the needle would have been found to vary 180°, or, in other words, where its north pole would have

pointed due south. This spot would, in all probability, at this time be somewhere not far from the meridian of 100° west of Greenwich."

As our navigators proceeded towards the west, to the farthest extreme of another large island which they named *Melville Island,* the difficulties which they had to encounter from ice and foggy weather continually increased; but on the 4th of September they succeeded in passing the meridian of 110° west longitude, by which they became entitled to the first sum in the scale of rewards granted by parliament, namely 5000*l.* A projecting point of land in this place was named, from the circumstance, *Bounty Cape.* A good roadstead, discovered at no great distance, was named the *Bay of the Hecla and Griper:* here the ensigns and pendants were hoisted; "and it created in us," says captain Parry, "no ordinary feelings of pleasure, to see the British flag waving for the first time in these regions, which had been hitherto considered beyond the limits of the habitable world."

The winter was now setting in fast, and it was with difficulty that the ships were forced through the new ice to Winter Harbour, at the head of the Bay of the Hecla and Griper. Three days were employed in cutting a canal with saws, the average thickness of the ice being seven inches; and the whole length of the cut was nearly two miles and one third. As soon as the ships were moored in their winter quarters, the men hailed the event with three loud cheers. The mercury in the thermometer had now fallen one degree below zero, and the sea was frozen over as far as the eye could reach; nor was open water seen after this period. Preparations were now made to meet the severities of a long and dreary winter of eight or nine months, during three of which they were to be debarred from the cheering light of the sun. All the heavy stores were removed on shore, so as to leave the decks clear for ventilation and exercise. The ships were roofed entirely over with thick wadding-tilts, such as are used for covering wa-

gons. The snow was banked up against them without, while stoves and ovens were provided for their warmth within. But notwithstanding these precautions, it was found that the vapour generated within the ships, instead of dissipating itself, as is usual in a temperate climate, condensed upon the beams and sides in such a degree as to keep them constantly wet; and as this inconvenience could be only partially removed by a current of heated air, it was found expedient to allow the frozen vapour to settle on the sides of the ships internally, in a solid plate of ice.

On their first arrival in Winter Harbour, parties were sent out to hunt, and found abundance of grouse and rein-deer; but these animals had all migrated from Melville Island before the end of October, foxes and wolves alone remaining through the winter. During the severest season, no bears were seen, and one solitary seal was all that appeared. These sports, however, were not without their danger: some of the men who neglected the necessary precautions, were severely frost bitten; and the torpor and suspension of the mental faculties produced by extreme cold, and resembling the effects of intoxication, were often perceptible in the hunting parties.

The greatest danger to be apprehended in the situation in which our navigators were placed, was the liability to depression of spirits, from the want of bodily exercise, the absence of light, and the gloomy monotony of external objects. It is well known that mental depression predisposes to attacks of scurvy; while cheerfulness, on the other hand, fortifies the bodily constitution, and mitigates the inconveniences which cannot be got rid of. To amuse the men, captain Parry and his officers got up a play, the first performance taking place on the 6th of November, the day on which the sun sank below the horizon, not to rise again for three tedious months. The sailors were delighted with the performance, and characteristically testified their applause by three hearty cheers. The active minds of the officers

needing more strenuous employment, they engaged in the composition of a Christmas piece, in which reference was made to the situation of the ships, and the service on which they were engaged. They also contributed to a weekly newspaper, entitled *The North Georgia Gazette and Winter Chronicle*, of which captain Sabine undertook the editorship. This gazette, consisting of one and twenty numbers, and deriving interest from the circumstances under which it was written, was printed on the return of the expedition. The dramatic performances being observed to be particularly successful in exhilarating the men, and also affording them employment in fitting up the theatre, and afterwards taking it to pieces, were repeated once every fortnight during the dark season.

Notwithstanding the intensity of the cold and the darkness, the officers generally rambled a little on shore every day; and they experienced no inconvenience, although the thermometer was from 30° to 50° below zero, provided there was no wind; but the least breath of air stirring made the cold intolerable, even when the thermometer was above zero. But these walks afforded no amusement; the dreary sameness of the scene, the torpid stillness and deathlike silence, were calculated to inspire no feelings but those of melancholy. In this way the shortest day arrived, or rather the middle of the long night. A little before and after noon on that day, there was as much light as to enable them to read small print, held towards the southern horizon, and to walk comfortably for two hours. During the month of January the thermometer generally ranged from 30° to 40° below zero. The scurvy now made its appearance, in one case, in the crew of the Hecla; and for some time its obstinacy caused not a little alarm: but the liberal use of antiscorbutics at length subdued it. Nothing contributed more to its cure than a daily supply of fresh mustard and cress, which captain Parry contrived to raise in his cabin, in boxes filled with earth, and placed near the stove-pipe. Though colourless for want of

light, these herbs had as pungent a flavour as if they had grown in the open air. The officers still continued to walk on shore, though, as the thermometer in the open air sank at times to 50° below zero, they underwent a transition in passing from the open air to the cabin of from 80° to 100°, and in some instances 120° of temperature.

On the 7th of February, the full orb of the sun was visible above the horizon: this was the signal for making a show of preparations to leave this gloomy abode, though the officers were well aware that many tedious months must pass over before they could be free from their icy prison. The month of February was by far the coldest part of the arctic winter. On the 15th the thermometer descended to 55°, and remained for fifteen hours not higher than 54° below zero. "We amused ourselves," says Captain Parry, "in freezing some mercury during the continuance of this cold weather, and by beating it out on an anvil previously reduced to the temperature of the atmosphere. It did not appear to be very malleable when in this state, usually breaking after two or three blows from the hammer. On the 24th, the observatory constructed on shore was discovered to be on fire. All hands instantly went to work to extinguish the flames, by heaping snow upon them; the thermometer, at this time, was 44° below zero, or 76° below the freezing point. The men's faces at the fire presented a singular spectacle: almost every nose and cheek was frost-bitten, and became quite white in five minutes after being exposed to the weather; so that the medical men, with some others appointed to assist them, were obliged to go constantly round while the men were working at the fire, and to rub with snow the parts affected in order to restore animation. Captain Sabine's servant, in his anxiety to save the dipping needle from the observatory, ran out without his gloves; his fingers, in consequence, were so completely frozen that, his hands being plunged into a basin of cold water, the surface was immediately covered with a cake of ice from the in-

tensity of the cold thus communicated to it; but animation could not be restored in this instance, and it was found necessary to resort to amputation."

As the cold relaxed, the ice which had for some time lined the ship's side began to melt, and about the 8th of March it became necessary to scrape off this coating. "It will scarcely be credited," says Captain Parry, "that we this day (8th of March) removed above 100 buckets full of ice, each containing from five to six gallons, being the accumulation which had taken place in an interval of less than four weeks; and this immense quantity was the produce chiefly of the men's breath, and of the steam of their victuals during meals. The middle of April arrived without any perceptible thaw; but on the 30th, the temperature of the atmosphere underwent a remarkable change, the thermometer rising to the freezing point, or, as in this climate it might be termed more properly, the thawing point, being the first time it had been so high for eight months. To the men this appeared a summer temperature, and the authority of the officers was obliged to be interposed to prevent them from throwing aside their winter clothing. Animation began now to spread through the surrounding scene." The first ptarmigan made its appearance on the 12th of May, and the day after were seen the tracks of rein-deer and musk oxen bending their course to the north. Thus their migration takes place in the first fine weather after the return of constant daylight. These symptoms and intimations of their approaching liberation were viewed with delight by our navigators; but a shower of rain, which fell on the 24th of May, created in them even feelings of surprise; "we being so unaccustomed," says Captain Parry, "to see water naturally in a fluid state at all, and much less to see it fall from the heavens, that such an occurrence became a matter of considerable curiosity, and I believe every person on board hastened upon deck to witness so interesting as well as novel a phenomenon." On the 1st of June, Captain Parry with some of the officers commenced

an excursion into the interior of Melville Island. They reached its northern extremity without perceiving any land farther to the northward or the westward. On their return from this journey, which employed fifteen days, they found the vegetation round Winter Harbour shooting forth with wonderful vigour, and the ice was covered with innumerable pools of water; the purple flower of a species of saxifrage imparted beauty and gayness to a scene hitherto dreary in the extreme. By the middle of July, the thermometer stood as high as from 56° to 60°; and, at length, on the first day of August, the ships were able to effect their escape from Winter Harbour; but the immense quantity of floating ice with which the strait was beset rendered their progress extremely difficult. They had to face dangers which ships less strong, or men less resolute, vigilant, and skilful, could not have escaped from. They still struggled to proceed towards the west, but all their efforts were of no avail to get beyond the south-west extremity of Melville Island; and on the 16th of August the attempt was given up as impracticable. The farthest point which the expedition reached in the Polar Sea was in latitude 74° 26′ 25″, and longitude 113° 46′ 43″.

On leaving Sir James Lancaster's Sound, the ships stood southward along the western shore of Baffin's Bay, with the view of surveying a coast but little known, and imperfectly seen in the former expedition. It was found to be indented with numerous deep bays or inlets: in one of these, about the lat. 70° 22′, a tribe of Esquimaux was met with, of whom captain Parry says, "Upon the whole, these people may be considered as in possession of every necessary of life, as well as most of the comforts and conveniences which can be enjoyed in so rude a state of society." On the 26th of September the ice was seen for the last time, and about the middle of November the ships arrived in the Thames. The crews returned with unimpaired health, after an absence of nearly eighteen months from their native country.

Besides the great additions to our geographical know-

ledge made by this expedition, it procured a copious stock of materials for scientific investigation. The magnetic phenomena observed, and those resulting from extreme cold, were highly curious and important. During the winter months in those regions, such is the extreme dryness of the atmosphere, that no snow whatever falls, nor does a cloud, indeed, ever appear in the heavens. Whatever moisture might exist in the air, floats about in minute *spicula*, or needles, in various forms of crystallisation. In very cold weather the breath of a person, at a little distance, looked exactly like the smoke of a musket just fired; and a party of men working on the ice seemed to be enveloped in a thick cloud. The smoke from the funnel, instead of ascending, floated horizontally for some miles from the ship. It is remarkable that the *aurora borealis*, though frequent, was by no means so vivid, or so rapid in its coruscations, as in a lower latitude. Between the parallels of 60° and 66° it usually displays a vivid blaze of light; but here it was extremely faint, and appeared almost always towards the southern horizon. From the variations and dipping of the magnetic needle observed during this expedition, it has been concluded that the magnetic pole may be supposed to be somewhere about lat. 72°, in long. 100°, or in the neighbourhood of Regent's Inlet.

CHAP. XIV.

PARRY'S VOYAGES.

PREPARATIONS FOR A SECOND VOYAGE. — ITS OBJECTS. — THE SHIPS ENTER FROZEN STRAIT. — DISCOVER DUKE OF YORK'S BAY. — REACH THE WELCOME. — REPULSE BAY EXAMINED. — INLETS EXPLORED. — THE SHIPS FROZEN IN AT WINTER ISLAND. — VILLAGE OF ESQUIMAUX. — THEIR CHARACTER. — TALENTS OF ILIGLIUK — SHE DRAWS A MAP OF THE COAST. — THE ICE BREAKS, AND THE SHIPS PROCEED. — DIFFICULTIES OF THE NAVIGATION. — FOX'S CHANNEL. — STRAIT OF THE HECLA AND FURY. — IMPOSSIBLE TO PASS TO THE WESTWARD. — WINTER

QUARTERS AT IGLOOLIK. — SNOW HOUSES OF THE ESQUIMAUX. — GEOGRAPHICAL INFORMATION OBTAINED FROM THEM. — EXCURSIONS OVER LAND. — LENGTH OF THE WINTER. — RETURN OF THE SHIPS. — THIRD VOYAGE OF PARRY. — HE WINTERS IN REGENT'S INLET. — ENDEAVOURS TO PROCEED IN THE SPRING. — THE FURY CRUSHED BY THE ICE AND ABANDONED. — ATTEMPT OF PARRY TO REACH THE NORTH POLE OVER THE ICE. — SAILS TO SPITZBERGEN. — JOURNEY OF TWO MONTHS ON THE ICE. — IS DRIFTED SOUTHWARDS. — FAILURE OF THE ATTEMPT.

If the voyage of captain Parry did not lead to the discovery of the north-west passage, it was at least productive of information of an encouraging description. There could be no doubt that he had discovered straits communicating with the Polar Sea, and through which his progress was barred by accumulations of ice, which, in all probability, occasionally break up, and allow a free passage. The opinion of the old navigators, that the northern portion of America is broken land, or rather a cluster of large islands, was rendered still more probable; and as but little was as yet known of the northern shores of Hudson's Bay, it was hoped that some inlet might be there found communicating with the Northern Sea, and in which, from its more southerly situation, navigation might be continued for a longer portion of the year.

The Hecla had answered so well on her former voyage, that the Fury, a similar ship, was prepared to attend her on the second one. Improvements were made in the internal fittings of the vessels. Charred cork was placed between the sides of the ships and the internal lining of plank, as a security against the cold; and a simple but well contrived apparatus for distributing heated air was fixed in each ship. Captain Parry was directed by his instructions to commence his examination of the coast after he had reached some point which he was sure was on the continent of America; and thence proceeding to the north, to keep along the coast, minutely exploring every inlet or opening that occurred, in order to ascertain the north-east point of that continent round which it was hoped he might reach the open sea, and

thus effect his passage round Icy Cape, and through Behring's Straits into the Pacific.

The ships left the Nore on the 8th of May, 1821; and encountered the first iceberg at the entrance of Davis's Strait on the 14th of June. In Hudson's Strait the difficulty of navigating among the ice was found to be much greater than in that of Davis, or Baffin's Bay. The relations of old navigators, respecting the large stones, the quantities of sand, shells, and weeds, seen here deposited on the floating fields of ice, were found to be correct. "The quantity in which these substances," says captain Parry, "here occurred, was really surprising, and puzzled us extremely to account for the manner in which they found their way upon the floes. Masses of rock, not less than a hundred pounds in weight, are sometimes observed in the middle of a floe, measuring half a mile or more each way, and of which the whole surface is more or less covered with smaller stones, sand, and shells."

From the numerous impediments that occurred in the navigation of Hudson's Strait, it was the 2d of August before the expedition reached the mouth of the channel formed between Southampton Island and the coast towards the north. Captain Parry, who believed this to be the same channel or strait which captain Middleton, in 1742, had named the Frozen Strait, determined, notwithstanding its inauspicious name, to endeavour to force a passage through it. If he could succeed in the attempt, it would save him a circuitous voyage of 150 leagues. After struggling onward for some days, the ships arrived at an inland basin of water, ten miles in width and about five in breadth, having regular soundings and good anchorage in every part, and perfectly free from ice.

To this magnificent bay, which captain Parry considers to be "one of the most secure and extensive harbours in the whole world," he gave the name of the *Duke of York's Bay*. On the 21st of August, a swell from the southward convinced our navigators that they had reached Sir Thomas Rowe's Welcome, which divides

Southampton Island from the mainland of America on the west. Fogs and a thick fall of snow for some time cut off the distant prospect, when, the weather suddenly clearing up, they found themselves almost completely surrounded by land, having entered unawares Repulse Bay, in which not a piece of ice was to be seen that could obstruct them in its thorough examination. It was found to be closed by land, and to be not very unlike the chart which Middleton drew of it. The examination of the north-east coast of the American continent, which was the main object of the voyage, may be said to have commenced on the 22d of August, just under the arctic circle. The difficult and laborious task of exploring every inlet and opening of the shore that might by possibility afford a passage to the west, was executed with a zeal, perseverance, and ability which have never been surpassed. The ships were frequently caught in the ice, and drifted with it to the southward; but the season was already so far advanced as to leave but little time for the prosecution of their researches. Nearly the whole of September was employed in surveying and ascertaining the continuity of land round several deep inlets, which are laid down on the charts under the names of Lyon's Inlet, Hoppner's Inlet, Gore Bay, Ross Bay, &c. The whole extent of coast newly discovered and explored amounted to more than 200 leagues.

This wearisome task was hardly concluded when the appearance of new ice announced the approach of winter; the thermometer at the same time stood at zero. "The formation of young ice upon the surface of the water is the circumstance which most decidedly begins to put a stop to the navigation of these seas, and warns the seaman that his season of active operations is nearly at an end. It is, indeed, scarcely possible to conceive the degree of hinderance occasioned by this impediment, trifling as it always appears before it is entered. When the sheet has acquired a thickness of half an inch, and is of considerable extent, a ship is to be stopped by it, unless favoured by a strong and ice wind; and even

when still retaining her way through the water at the rate of a mile an hour, our course is not always under the control of our helmsman, but depends upon some accidental increase or decrease in the thickness of the sheets of ice with which one bow or the other comes in contact. A ship in this helpless state, her sails in vain expanded to a favourable breeze, her ordinary resources failing, and suddenly arrested in her course upon the element through which she has been accustomed to move without restraint, has often reminded me," says captain Parry, "of Gulliver tied down by the feeble hands of Lilliputians. Nor are the struggles she makes to effect her release, and the apparent insignificance of the means by which her efforts are opposed, the least just or least vexatious part of the resemblance."

A small island near the point where the continent begins to trend to the northward, being found to afford good anchorage on its southern side, received the name of *Winter Island*, and the ships were here suffered to be frozen up. The warmth of the ships was better provided for in this than the preceding expedition, and the same arts were employed to amuse and occupy the minds of the men. Theatrical entertainments were again resorted to. Other evenings were devoted to music, and a school was established in each ship, from which the men derived equal profit and entertainment. But what chiefly contributed to alleviate the tediousness of a long and gloomy winter was a visit from a party of Esquimaux, who were seen approaching the ships across the ice on the 1st of February. Our voyagers accompanied these poor people to their huts on shore, and were astonished to find that those habitations of men, though within sight of the ships, had escaped their notice, anxiously as the eye lighted on any object that diversified the tiresome sameness of the scene. "Our surprise," says captain Parry, "may in some measure be imagined at finding an establishment of five huts, with canoes, sledges, dogs, and above sixty men, women, and children, as regularly and to all appearance as permanently fixed, as if they had

occupied the same spot the whole winter. If the first view of the exterior of this little village was such as to create astonishment, that feeling was in no small degree heightened on accepting the invitation soon given us to enter these extraordinary houses, in the construction of which we observed that not a single material was used but snow and ice. After creeping through two low passages, having each its arched door-way, we came to a small circular apartment, of which the roof was a perfect arched dome. From this three door-ways, also arched, and of larger dimensions than the outer ones, led into as many inhabited apartments, one on each side, and the other facing us as we entered. The interior of these presented a scene no less novel than interesting; the women were seated on the beds at the sides of the huts, each having her little fire-place or lamp, with all her domestic utensils about her. The children crept behind their mothers, and the dogs slunk past us in dismay. The construction of this inhabited part of the hut was similar to that of the outer apartment, being a dome, formed by separate blocks of snow laid with great regularity, and no small art, each being cut into the shape requisite to form a substantial arch, from seven to eight feet high in the centre, and having no support whatever but what this principle of building supplies. Sufficient light was admitted into these curious edifices by a circular window of ice, neatly fitted into the roof of each apartment."

The result of an acquaintance of eighteen months with these people was, on the whole, favourable to their character. They appeared to be inoffensive, remarkably honest, and, what could be hardly expected from savages, very affectionate in domestic life. The women were exempted from that degree of labour and drudgery which usually falls to their lot in uncivilised societies, their duties being confined to making clothes, cooking, and other domestic concerns. Though the Esquimaux exhibited in some things an extreme deficiency in intellect, for few of them could count beyond five, and after

an intercourse of eighteen months not one of them could speak a dozen words of English, yet they showed considerable ingenuity in providing for their wants. They were warmly and comfortably clothed, and the seams of their seal-skin boots were beautifully worked.

One of the tribe, a woman named Iligliuk, attracted the notice of our voyagers, by an obvious superiority of understanding, which, it appears, had also raised her in the esteem of her own countrymen. She was extremely fond of music, sang correctly, with a soft voice, and would listen for hours together to the tunes played on the organ. From her intelligence and readiness in apprehension, she was often employed as an interpreter, and received so many marks of attention from the English, that her vanity at last got the better of her sense, and she was completely spoiled. But in her excuse it may be urged, that few females have ever been assailed with flattery so hard to be resisted as the favour and respect of our voyagers must have appeared among the Esquimaux. The airs which she assumed were also counterbalanced by her real services; among which must be mentioned a rude chart which she drew of that part of the coast of America she was familiar with, and the neighbouring islands. Captain Parry having discovered that the Esquimaux were acquainted with the four cardinal points of the compass, marked them on a piece of paper, with the part of the coast where they wintered. Having done this, he says, "we desired her to complete the rest, and to do it *mikkee* (small); when, with a countenance of the most grave attention and peculiar intelligence, she drew the coast of the continent beyond her own country, as lying nearly north from Winter Island. The most important part still remained: and it would have amused an unconcerned looker on, to have observed the anxiety and suspense depicted in the countenances of our part of the group till this was accomplished; for never were the tracings of a pencil watched with more eager solicitude. Our surprise and satisfaction may, therefore, in some

degree be imagined, when, without taking the pencil from the paper, Iligliuk brought the continental coast short round to the westward, and afterwards to the south-south-west, so as to come within three or four days' journey of Repulse Bay. The country thus situated upon the shores of the Western or Polar Sea is called *Akkoolee*, and is inhabited by numerous Esquimaux; and half way between that coast and Repulse Bay, Iligliuk drew a lake of considerable size, having small streams running from it to the sea, on each side. To this lake her countrymen are annually in the habit of resorting during summer, and catch there large fish of the salmon kind; while on the banks are found abundance of rein-deer. To the westward of *Akkoolee*, as far as they can see from the hills, which she described as high ones, nothing can be seen but one wide extended sea. Being desirous of seeing whether Iligliuk would interfere with Wager River, as we know it to exist, I requested her to continue the coast line to the southward of *Akkoolee*, when she immediately dropped the pencil, and said she knew no more about it."

The information thus received was confirmed by other Esquimaux, who were requested to draw charts of the countries within their own knowledge; their delineations of the coast, made without any concert among them, agreed in a surprising manner. Captain Parry and his officers now recollected, that from a high hill at the head of Lyon's Inlet a brightness in the western sky, resembling what seamen call the ice blink, had been visible; and that from another height, a great deal of water, with islands and capes, had been seen to the west-north-west. The distance from the head of Repulse Bay to the Northern Sea was stated by the Esquimaux to be three *senicks* or *sleeps;* but their sleeps, or days' journeys are generally very short. On one occasion, a party, who had travelled northward from the ships a journey of forty sleeps, were overtaken in one day's sailing.

Spring made its appearance at Winter Island more tardily, if possible, than it had done at Melville Island,

in the former voyage; yet the former place was situated eight degrees and a half farther to the south. Nine months had been already spent here in the ice, when at length, on the 2d of July, after great exertions, the ships effected their escape; but the current setting to the southward down Fox's Channel, which our voyagers now proceeded to examine, carried with it such a quantity of drift ice as involved them in continual embarrassment and danger. The ships had frequently a narrow escape of being crushed by the icebergs, or being lifted up and overset by floes pressing under them. By unremitting perseverance, however, they reached by the 12th of July a small opening in the land, in lat. 67° 18′, out of which a current was observed to issue. As this offered a security against ice, captain Parry anchored as near to it as possible, and a party went on shore to explore the country. Unused as they had been for several months to the charms of verdure and picturesque scenery, their delight was indescribable, when, after rambling a little distance up the banks of a lively stream, they arrived at a series of cascades descending from crag to crag, and beyond it found the river increased in width, and flowing with a smooth unruffled surface among romantic hills, while the richness of vegetation on its banks seemed nearly miraculous in this climate. Soon after the ships arrived at the Islands of Amitioke and Ooglit, laid down in the chart of the Esquimaux, where they were informed that they should meet with vast numbers of the walrus or sea-horse. The report of the Esquimaux was found to be correct; for they fell in with such a multitude of these animals as, in captain Parry's opinion, are probably not to be found in any other part of the world. They were lying, in large herds, upon loose pieces of drift ice, from twelve to thirty in a group. Our voyagers now approached, with trepidation and anxiety, the place where the Esquimaux, whose statement had hitherto proved to be correct, had marked a strait conducting to the Western Sea. The passage was soon recognised, and final success was now confidently

expected; but what was the grief and mortification of our voyagers, when they found that an unbroken barrier of ice extended completely across the western mouth of the strait, from the northern to the southern land! As it was now the middle of July, and the ice was evidently not a new accumulation, but bore marks of having been long attached to the land on every side, the disappointment was complete, and no hope remained of the removal of the obstacle in that season.

After struggling for sixty-five days to attempt to force a passage to the westward, the ships returned to the island of Igloolik, where they were frozen in on the 30th of October. The canal cut through the ice by sawing and boring to bring the ships to their winter quarters, was above 4300 feet in length; the thickness of the ice in some places amounted to several feet; and during this severe labour the cold was intense, the thermometer being at one time nine degrees below zero. Thus were our navigators reduced to the necessity of spending a second winter in the ice, the pain of which was increased by the disappointment they had endured; for they had sanguinely calculated on a passage through the Polar Sea and Behring's Strait, to comfortable winter quarters in the South Sea. The same precautions were taken as in the preceding winter to keep up the spirits and preserve the health of the men: but dramatic amusements had now lost their novelty; and though no discontent existed among the people, there seems to have been less gaiety than on former occasions. They had learned, however, from the Esquimaux, to add considerably to their comfort by building a high snow wall round the ships, enclosing a large square like a farm-yard; the snow-drift was thus kept out, and a place for exercise was formed sheltered from every wind. By this measure, also, the heat of the ship was increased.

But the presence of a numerous tribe of Esquimaux chiefly contributed to enliven the dulness of the scene. The officers made excursions on both sides of the strait, which captain Parry named the *Strait of the Fury and*

Hecla. In its narrowest part it is two miles across, forming a canal of nearly equal width, and about a league in length. The land on the south or continental side is a great peninsula, named by captain Parry *Melville Peninsula.* It is a rugged mountainous country, intersected by chains of lakes, and on that account extremely difficult to penetrate. Captain Lyon made an attempt to cross it, but was obliged to desist from the undertaking after having proceeded only seven miles. The land to the north was named *Cockburn Island:* the Esquimaux informed our voyagers that it was surrounded by water; but they were unable to say whether the channel round it was navigable or not. Some of the officers made an excursion of about sixty miles to the western shore of Cockburn Island, whence they discovered the Polar Sea lying open before them; but round the entrance of the strait the ice was piled up in such vast mountains as left little reason to conclude that a navigable passage could ever be found this way.

The 1st of August, 1823, arrived, and the ships were still shut up within a barrier of ice; but captain Parry, impatient of his confinement, determined to make the utmost exertion to liberate himself, though it appeared necessary for that purpose to saw a canal of four or five miles in length. The laborious process was begun, when, the ice breaking up more completely, the ships once more reached the open water on the 12th of August. It was not doubted that the Strait of the Fury and Hecla communicated with the Polar Sea; and the obstacle which blocked it up, however formidable and even durable it might appear, was evidently of an adventitious nature, and it was physically possible that a mild season, or accidental causes, might disperse it, and open a free passage for the ships. Captain Parry, having reached the threshold which conducted to the fulfilment of his hopes, was unwilling to turn back while there remained the faintest prospect of success. He contemplated, therefore, taking the stores out of the Hecla, and sending home that ship, while he himself remained to con-

time his efforts for another season. This bold scheme, which might have led to disastrous consequences, calculated to stain the honour of the whole expedition, was happily laid aside from peculiar circumstances. The scurvy had made its appearance in the ships, and the dread of this formidable disease, with the arguments of captain Lyon, induced captain Parry to renounce his desperate attempt, and to make the best of his way home. They reached Lerwick, in the Shetland Islands, on the 10th of October, seven-and-twenty months having elapsed since they last saw traces of civilised man. The officers and crews returned in high health, only five men out of 118 having died in the course of this laborious voyage, during which they had spent two long winters in the ice, with the mean temperature considerably below zero.

Though this second voyage of captain Parry failed in its main object of finding a passage into the Polar Sea, yet it cannot be denied that it was productive of much important geographical information. When the difficulties to be contended with are taken into account, this voyage, compared with those of former navigators to those frozen seas, will appear eminently successful. Sufficient light had been now thrown on the geography of the north-west, to satisfy the most sceptical that the continent of America does not, in all probability, extend much farther north than lat. 70° ; and that the Atlantic communicates with the Polar Sea by numerous channels, more or less obstructed with ice, according to the direction of currents and other circumstances. A strong current was found to run through the Strait of the Fury and Hecla, which, carrying down the ice, fixed it firmly in its western mouth, and will, perhaps, always prevent that channel from being open to navigation. The strong current which sets down Fox's Channel, carrying with it so much drift ice, and, turning eastward, obstructs the navigation of Hudson's Strait, proceeds from the Polar Sea through the Strait of the Hecla and Griper. The ice which prevented the progress of captain

Parry in his first voyage beyond the south-western extremity of Melville Island seemed also of a permanent nature; but hopes were entertained that the ice which he had seen in Regent's Inlet was one of those accidental accumulations which change of wind might disperse; and that a passage into the Polar Sea might be expected through that inlet, which, running toward the south-west, is obliquely opened to the currents running eastward along the northern shores of America. The Hecla and Fury were accordingly again fitted out, and placed under the command of captain Parry and lieutenant Hoppner.

In this, the least successful of captain Parry's voyages, he was thwarted by that run of ill fortune to which navigators are always liable. His progress through Baffin's Bay was so much impeded by broken ice, that with much difficulty he reached Port Bowen, on the eastern shore of Regent's Inlet, before the season when navigation in that climate would be wholly impracticable. Had he arrived three weeks or a month sooner, he might, in all probability, have passed through the inlet to the open sea, and wintered, perhaps, on the northern coast of America.

The winter spent at Port Bowen resembled those already passed at Melville Island and Igloolik. The men were occupied in a school, and amused with masquerades. Experience had taught our navigators to provide more effectually for their warmth and comfort. By placing the stoves in the very bottom of the hold, and by other arrangements, they were enabled to keep up in the ships a uniform temperature of from 50° to 63°; and the general health of the seamen on this voyage suffered less derangement than on any former occasion. On the 20th of July, 1825, the breaking up of the ice allowed our voyagers to commence their active operations; but perhaps they would have lost nothing by a little prudent delay. They endeavoured to proceed along the western shore of Prince Regent's Inlet, but the immense masses of ice which floated along the middle of the strait gradually

approached the ships, and at length forced them on shore. The Fury was so much injured that she could hardly be kept afloat with four pumps at work, and the united exertions of officers and men. An attempt was made to repair her by heaving her down on the ice; but a gale of wind came on, brought down the ice in large quantities, drove the Fury a second time on shore, and injured her so irreparably that it was deemed necessary to abandon her with all her stores. The officers and men therefore embarked in the Hecla, and the expedition returned home. Captain Parry did not penetrate so far to the south in Regent's Inlet as he had done in his first voyage.

Thus disappointed in his sanguine expectations of a north-west passage, captain (now sir Edward) Parry did not at once abandon his schemes of northern discovery. It appeared to him possible to arrive at the North Pole by employing light boats and sledges, which might be alternately employed according as compact fields of ice or open sea interposed in his route. A plan deemed feasible by such men as Parry, Franklin, and Scoresby, necessarily commanded attentive consideration. The Royal Society recommended it to the Admiralty, who again fitted out the Hecla for the expedition, and placed her under the command of captain Parry. Two boats were constructed, combining in the highest degree the requisite qualities of strength and lightness. They were covered with waterproof canvas, and lined with felt. Runners also were placed under them on each side of the keel, that they might be used for sledges if it were found convenient.

Captain Parry sailed in April, 1827. At Hammerfest, in Norway, he took on board eight rein-deer to draw his sledges over the ice, with a quantity of moss as their provender. Much time was lost in working the ship to the north; and when the ice was at length reached, it was found thrown into such confusion, and piled so irregularly by violent gales and the commotion of the sea, that it appeared impossible to commence an expedition over it. The dangers to which the ship was exposed in

this situation, and the necessity of fixing her in a good harbour before he set forth on his journey, caused still farther delay.

At length, on the 22d of June, our adventurers commenced their extraordinary journey. From the rugged and broken nature of the ice, which was no where seen to extend in compact fields, it was found necessary to relinquish the design of employing rein-deer to draw the sledges. It required a zeal little short of enthusiasm to undergo, voluntarily, the toil of this expedition. When the travellers arrived at a pool of water in the ice, they were then obliged to launch their boats and embark. On reaching the opposite side, their boats were then to be dragged, frequently up steep and dangerous cliffs of ice, their lading being first removed. By this laborious process, persevered in with little intermission, they were able to effect but eight miles in five days. They travelled only during the night, by which means they were less incommoded with snow blindness, they found the ice more firm and consistent, and had the great advantage of lying down to sleep during the warmer portion of the twenty-four hours. Some time after sunset they took their breakfast, then toiling for a few hours they made their chief meal. A little after midnight, towards sunrise, they halted as if for the night; smoked their pipes; looked over the icy desert in the direction in which the journey was to be resumed; and then, wrapping themselves in their furs, lay down to rest. On the 22d of July, they advanced seventeen miles, the greatest distance they had yet been able to effect in one day; but the delays they had already encountered were sufficient to destroy all hopes of being able to reach the Pole, which was still 500 miles distant. They had advanced as far as lat. 82° 40′, and now limited their ambition to reaching the parallel of 83°; but just at the time when the state of the ice seemed favourable for their progress, the wind shifted to the north, and drifted them in the opposite direction, so that when, with great labour, they travelled ten or eleven miles over the ice, observations

showed that they were four miles to the south of the position which they had occupied on the 22d, so that, the drifting of the snow fields had carried them fourteen miles to the southward. It was obviously vain, under these circumstances, to persist any longer. Our voyagers returned, therefore, and arrived at the ship in Hecla Cove on the 21st of August, after being two months on the ice, completely foiled in their attempt to reach the Pole, and obliged to rest satisfied with the humble consolation that they had, perhaps, penetrated about a degree farther to the north than any previous expedition of complete authenticity.

CHAP. XV.

JOURNEY OF CAPTAIN FRANKLIN.

EXPEDITION OF CAPTAIN FRANKLIN TO THE MOUTH OF THE COPPERMINE RIVER. — ARRIVAL AT YORK FORT. — JOURNEY TO FORT CHEPEWEYAN. — MODE OF TRAVELLING IN WINTER. — ITS DANGERS. — DECREASE OF THE INDIAN TRIBES. — JOURNEY FROM CHEPEWEYAN COMMENCED. — DIFFICULTIES EXPERIENCED. — GREAT EXERTION OF MR. BACK. — WINTER RESIDENCE AT FORT ENTERPRISE. — INTENSE COLD. — THE TREES FROZEN. — ESQUIMAUX SNOW-HOUSE. — AN INDIAN BEAUTY. — THE JOURNEY RECOMMENCED. — STRATAGEM OF THE WOLVES. — THE MOUTH OF THE COPPERMINE. — THE PARTY EMBARK. — PROCEED TO THE EASTWARD. — POINT TURNAGAIN. — THEY COMMENCE THEIR RETURN OVER LAND. — THE CANOES BROKEN. — MEANS DEVISED TO CROSS THE COPPERMINE. — DREADFUL SUFFERINGS OF THE PARTY. — MR. BACK SENT FORWARD TO THE FORT. — DR. RICHARDSON REMAINS WITH THE DISABLED, WHILE CAPTAIN FRANKLIN GOES ON. — MR. HOOD MURDERED BY AN INDIAN OF THE PARTY. — RESOLUTE CONDUCT OF DR. RICHARDSON. — HE REACHES FORT ENTERPRISE. — STATE IN WHICH HE FOUND CAPTAIN FRANKLIN. — CONTINUATION OF THEIR SUFFERINGS. — RELIEF ARRIVES.

WHILE captain Parry was employed in exploring a passage from Baffin's Bay to the Pacific, another expedition was despatched over land to ascertain the true position of the Coppermine River, and the windings of

the shore to the eastward of it. This measure, which had apparently no great difficulties, seemed to promise eminent advantages to geographical science, and might prove serviceable to the intrepid navigator employed to the northward. Lieutenant (now captain) Franklin was selected to command this expedition, accompanied by Dr. Richardson, a gentleman well skilled in natural history; Mr. Hood, and Mr. Back, two midshipmen; and two English seamen.

Captain Franklin and his companions embarked in the end of May, 1819, and arrived in safety at York Factory, on the shores of Hudson's Bay, on the 30th of August. Preparations for their long and difficult journey were immediately commenced, and the information which the local experience of the fur traders could supply them was eagerly collected. On the 9th of September the journey commenced from York Fort, and on the 22d of October our travellers arrived at Cumberland House; a distance of 690 miles. Notwithstanding the lateness of the season, captain Franklin resolved to push forward to Fort Chepeweyan, near the western extremity of Athabasca Lake, in order that he might personally superintend the preparations for the journey of the ensuing summer. He accordingly set out with Mr. Back on the 18th of January, and arrived at the fort on the 26th of March; thus performing a journey of 857 miles in the very depth of winter; the thermometer frequently sinking to forty and sometimes more than fifty degrees below zero. When the rivers, which form the chief communications through these extensive countries, are frozen up, the traders have recourse to sledges drawn by dogs, in which they can proceed at the rate of fifteen miles a day. They sleep in the open air, though the thermometer should be many degrees below the freezing point; their dogs sleeping round them, to receive and to communicate heat. In these journeys the severity of the cold is not so much dreaded as the danger of perishing for want of food; when violent snow storms arise the travellers often lose their way, and are sometimes driven to

the sad necessity of killing their dogs for food. The moose, the rein-deer, and the bison, appear to be quite expelled from the great plains between Hudson's Bay and the Mackenzie River; and the fur-bearing animals are likewise so scarce, that they will be totally extinct in a few years, it is feared, on the eastern side of the Rocky Mountains. The influence of Europeans has had as sinister an effect on the Indian inhabitants of this extensive region as on the lower animals. The tribe of the Crees or Kristenaux, spread over an extent of 20,000 square miles, does not at present exceed 500 in number; so that this once powerful nation will, probably, soon disappear from the face of the earth. Disease generated and increased by the too free use of spirituous liquors is the chief cause of this rapid depopulation.

As soon as spring began to appear, Dr. Richardson and Mr. Hood set forward to join their companions at Fort Chepeweyan; the appearance of spring in these climates is exhilarating and enchanting beyond what can be conceived in countries where nature never invests herself during eight months together in the snowy garb of winter. The thaw is hardly begun, when the trees are clothed with foliage, and the whole vegetable world comes forth with a luxuriance no less astonishing than agreeable. But at the same time clouds of mosquitoes, and the stinging sand-fly, are so active and troublesome, that the traveller who suffers from them is disposed to give the preference to the winter journey, when he has to endure an intense cold, lying unsheltered on the snow.

The whole party were now assembled at Chepeweyan; and on the 18th of July, 1820, they set forward on their journey, with hopes that, before the good season should expire, they might be able to establish themselves comfortably for the winter at the mouth of the Coppermine River, and to employ the whole of the following spring in the examination of the coast to the eastward. But the usual difficulties that accompany extensive journeys in these regions were experienced, and, unhappily, to a degree that was not anticipated. The rapids of the

rivers, the shallows of the lakes, and numerous portages, impeded the progress of our travellers, who suffered also, unhappily, from scarcity of provisions; an embarrassment from which, it may be supposed, a little calculation and foresight might have relieved them. As soon as scarcity was felt, discontent made its appearance among the Canadian boatmen; and the cordiality which ought to subsist among all engaged in so hazardous an enterprise was immediately at an end. New ice appeared on the small pools about the 20th of August, and geese were observed flying to the southward; an unequivocal sign of the approach of winter. The Canadian hunters declared that it would be impossible to proceed, and captain Franklin was consequently obliged to forego his intention of reaching the Coppermine River this season; and the party prepared to settle themselves for the winter on the spot which they had now reached, distant about 550 miles from Chepeweyan. On a rising ground near the bank of a river named Winter River, the Canadians constructed a house, to which they gave the name of Fort Enterprise. Trees of considerable size, chiefly pines, grew round the river and the adjoining lake. Fort Enterprise is situated in lat. 64° 28′, long. 113° 6′.

As soon as our travellers and their retinue were established in winter quarters, all hands were employed in laying in a stock of provisions, and in providing from the flesh of rein-deer that preparation of pounded meat known in North America by the name of *pemmican*. At first they had prospects of plenty; rein-deer were numerous, not fewer than 2000 having been seen in one day; and before they emigrated to the south, about 180 were taken and converted into dried meat: but this apparently large stock, with the addition of fish from the neighbouring lake and river, was barely sufficient for the consumption of the party, and of the train of Indians who crowded round the fort, when winter set in, to live on the charity of the whites. Moreover the ammunition was expended, and the packages of blankets, tobacco, and other necessary articles, had not yet arrived from the

southward. In consequence, Mr. Back, with some Canadian and Indian attendants, set out on the 18th of October to return to Chepeweyan; and by this extraordinary exertion, he relieved the expedition from an embarrassment which would probably have prevented its proceeding in the following summer. The journey was performed wholly on foot, and in the middle of winter, and the sufferings which he endured are thus briefly summed up in his own words:—"I had the pleasure of meeting my friends, all in good health, after an absence of nearly five months, during which time I travelled 1104 miles in snow shoes, and had no other covering at night in the woods than a blanket and deer-skin, with the thermometer frequently at 40°, and once at 57°, below zero, and sometimes passing two or three days without tasting food." To estimate the courage of the man who voluntarily undertook such a journey, it must be taken into account, that walking in snow shoes occasions the most dreadful sufferings to the inexperienced. "The pain of this mode of travelling," as captain Franklin says, "can be but faintly imagined by a person who thinks upon the inconvenience of marching with a weight of between two and three pounds constantly attached to galled feet and swelled ancles."

Those who remained at Fort Enterprise experienced nearly as much inconvenience from the severity of the cold. It is remarkable, that the cold felt here in December exceeded, at one time, by three degrees, that experienced by Parry in Melville Island, which is situated nine degrees nearer to the pole. During these intense colds the atmosphere was generally calm, and the woodcutters and others were able to pursue their ordinary occupations without using any extraordinary precautions: those who perish from cold in this country generally owe their destruction to the circumstance of being overtaken in an unsheltered place by a storm of wind, which, as it rapidly extracts the heat from the body, seems to add to the intensity of the cold, and soon proves fatal. The trees round Fort Enterprise were frozen to

their very centres, and became as hard as stones; some of the axes were daily broken, and by the end of December only one was left that was fit for felling trees.

Two Esquimaux interpreters from Hudson's Bay accompanied Mr. Back to Fort Enterprise. Immediately on their arrival, they commenced the construction of a snow house, which they maintained to be more comfortable and warm than the wooden one already erected. They built themselves a dome about twelve feet in diameter and eight feet high, which, from the purity of the material employed in its construction, and the translucency of its walls, had within a very agreeable appearance. During the dreary winter months the officers employed themselves in drawing, and writing their journals. They also found some amusement in studying the character of their Indian followers. The old chief of the Copper Indians had a daughter, who was considered the greatest beauty in the whole tribe, and so much the object of contest among her countrymen, that, although under sixteen years of age, she had successively belonged to two husbands. Mr. Hood drew her portrait, much to the annoyance of her aged mother, who was exceedingly afraid, she said, that her daughter's beauty would induce the great chief who resided in England to send for the original, after seeing the likeness.

It was the 14th of June, 1821, before the ice was sufficiently broken in the Coppermine River to allow of its being navigated by canoes. Their stock of provisions was now nearly exhausted, and it was evident that the party, in the prosecution of their journey, would have to depend for subsistence, in a great measure, on the exertions of the hunters; and these showed symptoms of insubordination as often as they were reminded of the importance of their exertions. The rocky channel of the Coppermine River presented many impediments to navigation; but the grassy plains on either side abounded with game, particularly with the musk ox, of which a great number were killed. These animals are usually followed by wolves, who hunt in

packs, and of which our travellers relate some anecdotes indicating an extraordinary decree of sagacity. The wolves, being unable to hunt down the moose and reindeer, have recourse to a stratagem to drive them over precipitous cliffs. "While the deer are quietly grazing, the wolves assemble in great numbers, and, forming a crescent, creep slowly towards the herd, so as not to alarm them much at first: but, when they perceive that they have fairly hemmed in the unsuspecting creatures, and cut off their retreat across the plain, they move more quickly; and, with hideous yells, terrify their prey, and urge them to flight by the only open way, which is that towards the precipice; appearing to know that when the herd is once at full speed, it is easily driven over the cliff, the rearmost urging on those that are before. The wolves then descend at their leisure, and feast on the mangled carcases." This stratagem was once attempted on Dr. Richardson. While sitting, one evening, on the edge of a precipice above the Coppermine River, he perceived nine white wolves creeping towards him in a crescent: he advanced boldly, and they allowed him to pass; but a poor deer, hemmed in at the same time, was shortly afterwards driven over the precipice.

On the 18th of July, our travellers arrived at the mouth of the Coppermine; and here the Indians, terrified at the thoughts of meeting with the Esquimaux, with which nation they carry on implacable warfare, finally determined to return. Mr. Wentzel, a clerk of the North West company, went with them, with instructions from captain Franklin to lay in a stock of provisions at Fort Enterprise, and to make other arrangements which accidents and the necessities of the expedition might require. The Canadians, though amused with the first view of the sea, were terrified at the thought of launching on it. It required much pains to prevent them from sinking into utter despondency. The cheerfulness of John Hepburn, the English seaman, who was delighted with a view of the element to which he

had been so long accustomed, had a better effect on them than the exhortations of their commander.

The fears of the Canadians were certainly excusable: it required all the hardihood and intrepid resolution of British seamen to embark, at so late a season, on so perilous an enterprise. On the 21st of July, twenty people, of whom fifteen had never seen salt water, launched on the Polar Sea, in two frail bark canoes, with provisions for only fifteen days, and a voyage before them of indefinite extent. The sea was found to be open, with little or no ice. The tide was scarcely perceptible; but, from the position of the drift wood along the shore, captain Franklin concluded that a current ran to the eastward. The farthest point to which our adventurous navigator proceeded was Point Turnagain, in lat. 68½°. This point on the east, with Cape Barrow on the west, formed the opening of a deep gulf that ran southward as far as the arctic circle. This gulf, which captain Franklin named *George the Fourth's Coronation Gulf*, is studded with numerous islands, indented with sounds affording excellent harbours, with good anchorage, all of them supplied with small rivers of fresh water, abounding with salmon, trout, and other fish. Captain Franklin, finding it absolutely necessary to return, and his stock of provisions being exhausted before he reached Hood's River, at the bottom of Coronation Gulf, determined to proceed up this river as far as it was navigable, and then to strike across the country in a direct line to Fort Enterprise, instead of retracing his course, as he had originally intended, to the Coppermine River. But a cascade 250 feet in height, in Hood's River, soon put a stop to their navigation; they were obliged, therefore, to prepare for a land journey, to reduce their canoes to more portable dimensions, and to abandon part of their baggage. On the fifth day of their journey on foot, when they were at a considerable distance from the river, they were surprised by a heavy fall of snow, the harbinger of approaching winter. Their distresses now increased daily:

they had to struggle, in boisterous weather, through snow two feet deep, and over a barren country which scarcely produced a shrub for fuel. The sun being hid, they had no opportunity of making celestial observations; so that, to increase their anxiety, they were reduced to the necessity of guessing their way through a country totally unknown. During a journey of three weeks, all the fresh meat that could be procured amounted to only five days' consumption. The only additional resource was the *tripe de roche*, a specious of lichen that grows on the rocks; and this unpalatable weed was so scanty, that some days passed without a meal at all. The strength and spirits of the Canadians sunk rapidly from fatigue and want of food. Despair made them reckless of consequences; and, owing to their inattention, the canoes were both dashed to pieces, although our travellers were aware that they should have to cross the Coppermine River. On the 26th of September, they arrived on the banks of this river. The weather had become mild, a few small deer had been killed, and a delusive ray of hope shone on our weary travellers; but they were now without the means of crossing the river, which lay between them and the place of their destination. No trees could be found to make a raft: faggots of dried willows bound together were unmanageable without poles or oars. Dr. Richardson, attempting to swim across the river with a line round his body, was soon benumbed by the intense cold, and drawn to land in a state of total insensibility. At length a kind of basket was constructed, large enough to hold one person, and covered with a few fragments of canvass that remained: in this frail machine the party crossed the river one by one; above eight days of fine weather having been consumed in this place for want of the canoes.

The last stage of the journey turned out to be by far the most calamitous of the whole. It was now the 4th of October; the weather, which had been unusually mild while the party lingered on the eastern bank of the Coppermine, now resumed its severity. The ground was

covered with snow; Fort Enterprise was forty miles off; not a morsel of food remained; and the whole party were miserably reduced in strength by toil, anxiety, and privation. Mr. Back and three Canadians hastened forward in the hope of meeting a band of Indian hunters in the neighbourhood of Fort Enterprise. A few days afterwards captain Franklin and seven of the party proceeded onward, leaving Dr. Richardson and Mr. Hood to take care of those who were unable to continue the march. Fort Enterprise was but twenty-four miles off when this separation took place. Four of those who set out with captain Franklin left him in the course of his journey, being unable to proceed; but Michel, an Iroquois, alone returned to Dr. Richardson's party, the other three were heard of no more. Captain Franklin reached the fort on the 11th, completely exhausted, having tasted no food for five days; and what was his dismay when he found the place without an inhabitant, with no provisions, no trace of a living animal, and the ground deeply covered with snow. He endeavoured to set out in quest of the Indians, that he might proceed to the relief of Dr. Richardson and his party; but his strength was now utterly gone, and he was obliged to return the next day to his dreary and desolate abode. Eighteen days passed over him in this miserable condition, with no other food than the bones and skins of the deer which had been consumed the preceding winter, boiled down into a kind of soup; when, on the 29th of October, Dr. Richardson and John Hepburn made their appearance, but without the rest of the party. Each was shocked at the emaciated appearance and sepulchral voice of the other, not being aware that he was himself as much a picture of misery.

Dr. Richardson had now a melancholy tale to relate. For the first two days his party had nothing whatever to eat. On the third day, Michel arrived with a hare and partridge, which afforded each a small morsel. Then another day passed without food. On the 11th, Michel offered them some flesh, which he said was part of a wolf;

but they afterwards became convinced that it was the flesh of one of the unfortunate men who had left captain Franklin's party to return to Dr. Richardson. Michel was daily growing more insolent and shy, and it was strongly suspected that he had a hidden supply of meat for his own use. On the 20th, while Hepburn was cutting wood near the tent, he heard the report of a gun; and, looking towards the spot, saw Michel dart into the tent. Mr. Hood was found dead: a ball had entered the back part of his head, and there could be no doubt but that Michel was the murderer. He now became more mistrustful and outrageous than before; and, as his strength was superior to that of the English who survived, and he was well armed, they became satisfied that there was no safety for them but in his death. "I determined," says Dr. Richardson, "as I was thoroughly convinced of the necessity of such a dreadful act, to take the whole responsibility upon myself; and immediately upon Michel's coming up, I put an end to his life by shooting him through the head." They employed six days in travelling a distance of twenty-four miles, existing on lichens and pieces of the skin cloak of Mr. Hood. On the evening of the 29th they came in sight of the fort, and at first felt inexpressible pleasure when they beheld the smoke issuing from the chimney. The absence of any footsteps in the snow filled them with dismal bodings; and these were realised, when, on entering the house, they saw the wretchedness that reigned there. Two days after the arrival of Dr. Richardson, two of the Indians who accompanied captain Franklin expired of want. The only remaining man, and the captain himself, were so reduced that a few hours would in all likelihood terminate their existence. Dr. Richardson and Hepburn also felt themselves rapidly declining, when, on the 7th of November, three Indians, sent by Mr. Back, brought the long-expected relief. The Indians cleaned the house and attended the famished travellers with a kindness which could not have been exceeded in the most civilised communities. When the party acquired a little strength, they left the fort and

proceeded to the nearest of the company's posts, where they met with their companion Mr. Back, to whose resolution and physical strength the expedition owed its early success and its ultimate safety.

The results of this journey, which, including the navigation along the coast, extended to 5500 miles, are obviously of the greatest importance to geography. As the coast, running northward, was followed to Cape Turn-again, in lat. 68½°, it is evident, that if a north-west passage exist, it must be found beyond that limit. The country traversed by the expedition afforded little opportunity for the description of scenery; the same general character seems to pervade all these northern regions of the new world. We find every where rivers and chains of lakes intersecting the whole country, with monotonous forests of pines, bordered by birch and willow, gradually dwindling until they at length totally disappear in about lat. 68°.

The officers of the expedition had many opportunities, during their residence at Fort Enterprise, of studying the phenomena, electrical, magnetic, and atmospheric, that accompany the aurora borealis. This meteor, it appears, is more frequent and vivid in the neighbourhood of the arctic circle than in more northern latitudes. It was concluded, from a vast number of experiments, that the magnetic needle was affected by the aurora under certain circumstances, particularly when the flashes appeared to be between the clouds and the earth. The observations of the officers also led them to conclude that the aurora, instead of being beyond the region of the atmosphere, is rarely at a height exceeding six or seven miles. Its beams were seen frequently to dart between the clouds, and it was evidently affected by the wind. One of the fur traders told Mr. Hood, that he once saw the coruscations of the aurora borealis so vivid and low, that the Canadians fell on their faces and began to pray and cry, fearing they should be killed; and that he threw away his gun and knife, that they might not attract the flashes; for they were within two feet of the

earth, flitting along with incredible swiftness, and moving parallel to the surface. He likewise affirmed that they made a loud rustling noise, like the waving of a flag in a strong breeze. This noise made by the flashes of the aurora borealis is now, it appears, called in question. The Siberians affirm that it is sometimes so loud that their dogs, terrified by it, lie down and refuse to draw the sledges. The officers of the expedition never heard the noise, nor were they able to collect any information respecting it which could establish it on a better foundation than mere vulgar report.

In travelling through the valleys which intersect the Copper Mountains, Dr. Richardson picked up some plates of native copper, various ores of the same metal, and trap rock associated with it. The Indians dig wherever they observe the prehnite lying on the soil, experience having taught them that the largest pieces of copper are found in its neighbourhood. They report that copper is to be found in every part of this range which they have examined, for thirty or forty miles to the north-west, and that the Esquimaux also resort to them to search for that metal. Some ice chisels, above a foot in length and half an inch in diameter, formed of pure copper, were afterwards found among the Esquimaux.

CHAP. XVI.

SECOND JOURNEY OF CAPTAIN FRANKLIN.

EXPEDITION TO SURVEY THE COAST WESTWARD FROM THE COPPER-MINE RIVER. — PREPARATIONS AND INSTRUCTIONS. — VOYAGE DOWN MACKENZIE'S RIVER. — WINTER QUARTERS IN GREAT BEAR LAKE. — CAPTAIN FRANKLIN PROCEEDS TO THE MOUTH OF THE MACKENZIE. — COAL CLIFFS ON FIRE. — THE LOUCHEUX INDIANS. — VIEW OF THE SEA. — RETURN UP THE RIVER. — GREAT HEAT. — THE BEAR RIVER. — AMUSEMENTS IN WINTER QUARTERS. — THE THAW BEGINS. — THE EXPLORING PARTIES COMMENCE THEIR LABOURS. — CAPTAIN FRANKLIN PROCEEDS EASTWARD FROM THE MACKENZIE. — STRUGGLE WITH THE ESQUIMAUX. — ICE MET WITH. — INFORMATION OBTAINED FROM

THE ESQUIMAUX. — HERSCHEL ISLAND. — CLARENCE RIVER. — POINT DEMARCATION. — INTELLIGENCE RESPECTING THE RUSSIANS. — FOGGY WEATHER. — FRANKLIN OBLIGED TO RETURN. — DISCOVERS PEEL RIVER. — PROGRESS OF DR. RICHARDSON TO THE EASTWARD FROM MACKENZIE RIVER. — INTERCOURSE WITH ESQUIMAUX. — THEIR CHARACTER. — ACCOUNT OF ESQUIMAUX LAKE. — WOLLASTON ISLAND. — ARRIVAL AT THE COPPERMINE. RETURN TO THE GREAT BEAR LAKE. — RESULTS OF THESE SURVEYS.

THE sufferings endured in the last expedition did not deter the same intrepid individuals from repeating the attempt to explore the shores of the Polar Seas. Towards the close of 1823, government made known its intention of sending out another expedition under captain Parry, to try to find the passage to the west through Regent's Inlet. At the same time captain Franklin proposed to survey the coast westward from Mackenzie River. His offer was accepted, and it was hoped that experience dearly purchased would instruct him to obviate all risk of encountering privations like those of the last voyage. Orders were immediately forwarded to the agents of the Hudson's Bay company, to prepare a supply of provisions: at the requisite stations boats were constructed, combining, in the highest possible degree, the requisite qualities of strength and lightness; and these were forwarded with the baggage and stores, to proceed into the interior, from Hudson's Bay. Captain Franklin, Dr. Richardson, Mr. Back, and Mr. Kendal, proceeded by way of New York. Their instructions directed them to form their winter establishment in the neighbourhood of the Great Bear Lake, and, in the spring of 1826, to proceed down the Mackenzie. At the mouth of this river the travellers were to separate: captain Franklin and Mr. Back were to go westward, to endeavour to reach Kotzebue's Inlet, where they might expect to meet the Blossom frigate, commanded by captain Beechy; Dr. Richardson and Mr. Kendal were, at the same time, to proceed towards the east, so as to examine the line of coast between the Mackenzie and Coppermine Rivers.

The officers, proceeding by New York, Niagara, and Lake Superior, overtook the boats in Methye River on the 29th of June, 1825. This spot is in lat. 56° 10′, lon. 108° 55′, and almost at the head of the waters that flow eastward into Hudson's Bay. The officers had travelled 2800 miles, and the boats 1200, before they met together.

Once embarked on the Mackenzie, our travellers had an easy navigation. In many parts of the country which they had crossed, between *Isle de la Crosse* and the Mackenzie, their view was impeded by the smoke of woods on fire. Whether these conflagrations arise from design on the part of the Indians, or from their negligence in scattering the embers from their fires, could not be learned with certainty. In lat. 62° stands Fort Simpson, at the confluence of the Mackenzie and the River of the Mountains, descending from the west. By this river the traders procure provisions, and, among other articles, potatoes in abundance, the cultivation of which has been advantageously introduced into this remote region. The Mackenzie, hitherto half a mile or a mile in width, spreads, below Fort Simpson, into a majestic stream about two miles broad. Our travellers were now at no great distance from the Great Bear Lake; and, as five or six weeks of the good season still remained, it was resolved that captain Franklin and Mr. Kendal should descend the river to the sea, and survey its mouth, by which they might considerably abridge the operations of the ensuing summer. Dr. Richardson, at the same time, was to examine the east side of the Great Bear Lake, while Mr. Back was directed to superintend the preparations for wintering.

The entrance of the Bear Lake River is distinguished by a very remarkable mountain, whose summit displays a variety of insulated peaks, crowded in the most irregular manner. It is composed of limestone; and, from the lower cliffs, which front the river, a dark bituminous liquid oozes and discolours the rock. The stream which descends from the Bear Lake is remarkably pure and

limpid; while the waters of the Mackenzie are white and turbid. A few miles above the Bear Lake River, and near its mouth, the banks of the Mackenzie contain much good coal, which was on fire in 1825, as it had been observed to be by Mackenzie, in his voyage to the sea: its smell was very disagreeable. On subsequent trial, at the winter quarters on Great Bear Lake, this coal was found to emit but little heat, and to be totally unfit for the blacksmith's use. The banks likewise contained layers of a kind of unctuous mud, which the Indians in the neighbourhood use occasionally as food, during seasons of famine; and even, at other times, chew as an amusement. It has a milky taste, and the flavour is not disagreeable. Our travellers used it to whiten the walls of their dwellings; for which purpose it appeared well adapted.

The scenery of the Mackenzie below Bear Lake River is, in many places, highly romantic. In one place, called by the traders the Ramparts, the river, varying in breadth from 400 to 800 yards, runs for seven miles through a defile, the walls of which are sometimes 150 feet high. Small streams trickling over the cliffs wear the rock into a turreted shape, while numerous cavernous openings, occasionally assuming the form of Gothic archways, sometimes give the cliffs the character of an ancient cathedral. On the 10th of August, captain Franklin arrived at Fort Good Hope, the lowest of the company's establishments. This abode of civilised man, whom the love of gain induces to brave the inclemency of those rigorous climates, is situated in lat. 67° 28′ 21″ and lon. 130° 51′ 38″. This fort was established for the purpose of carrying on trade with the tribe of Indians called *Louchoux*, or *Squinters*, an appellation which captain Franklin is disposed to interpret sharp-sighted. They are, he says, a well-looking people, resembling the Esquimaux in manner and general appearance; but not in their eyes, which are prominent and full. They resemble that nation, also, in their custom of perforating the septum of the nose, through which, like the Esqui-

maux, they thrust pieces of bone or small strings of shells, which they purchase from that people.

On approaching the sea, captain Franklin experienced no difficulty but what arose from the number of channels and branches into which the river divides itself. The banks, as well as the islands, are entirely alluvial, supporting willows at the lower part, and spruce fir trees at the summits. Two days' voyage through these channels brought our travellers within sight of the ocean. The water was still quite fresh, and continued so until, rowing towards an island at a distance, they entirely lost sight of the eastern shore. A line of strong ripple marked the termination of the fresh water; that on the seaward side being brackish; and in their further progress of three miles to the island, they had the indescribable pleasure of finding the water decidedly salt. The sea to the northward appeared quite free from ice; numerous seals and whales, black and white, were seen sporting on its surface. The island on which captain Franklin landed, and which he named *Garry Island*, is about five miles long by two broad, and seems to be a mass of frozen mud, with an appearance of vegetable mould in some places exposed to the sun. Here the union flag was hoisted, and captain Franklin placed a letter, with the account of his proceedings, at the foot of the flag-staff, in case that captain Parry, on entering the Polar Sea, might approach that island. Another letter of the same purport, enclosed in a waterproof box, was sent adrift with the same intention. The rise of tide observed here was only three inches, and the position of Garry Island was ascertained to be 69° 20′ lat. and 135° 41′ lon. Mackenzie erred but little in the latitude he assigned to the mouth of this river; and, indeed, captain Franklin fully vindicates him from the imputations thrown on his veracity, for asserting that he had reached the sea without having ascertained that the water was salt. "It is probable," says captain Franklin, "that even had the sea been free from ice at the time of his visit, he could not have gone far enough to prove its saltness, though the boundless horizon, the

occurrence of a tide, and the sight of porpoises and whales, naturally induced him to say that he had arrived at the ocean. The survey of the Mackenzie, made on this expedition, differs very little in its outline from that of its discoverer, whose general correctness we had often occasion to admire."

The examination of the mouth of this great river being thus happily effected, our travellers commenced their return. The river had fallen considerably, and the difficulty of ascending the rapids was consequently increased. It deserves to be noticed, that towards the end of August, our travellers found the weather almost inconveniently warm; the thermometer in the shade stood at 66°, and at 76° when exposed to the sun. On the same day the refraction of the atmosphere, which had been observed to be unusually great towards the mouth of the Mackenzie, was particularly powerful. The mountains were distorted into the most extraordinary shapes, and even the banks of the river at a little distance appeared to have such an elevation that they could hardly be recognised.

On the 5th of September, captain Franklin and his party arrived at the winter residence on Great Bear Lake, to which the officers in his absence had given the name of *Fort Franklin*. Dr. Richardson had previously returned, having concluded his examination of the north-eastern shore of the lake, where it approaches nearest to the Coppermine River. He fixed also upon the place to which the eastern expedition should direct their steps on their return from the Coppermine River the following season. The establishment at Fort Franklin was composed of several comfortable dwellings, placed on a dry sandy bank about twenty-five feet above the lake; towards the north a ridge of hills of moderate elevation bounded the prospect, and afforded some shelter in that direction; the south-western arm of the Bear Lake, here about four miles wide, opened towards the south. At a little distance from the fort were trees in abundance, chiefly black and white spruce and larch, some of which

were fifty feet high. The number of persons assembled at the fort amounted to fifty, including Canadians and Indian hunters, with their wives and children.

When the winter set in, the officers amused themselves in drawing, and writing their journals; a school also was established, to occupy the men. When the migrating birds had wholly disappeared, the view abroad became exceedingly dreary; but on the 11th of October a great fall of snow took place, and with this began the amusements and occupations of a northern winter. General pleasure was felt when it was first announced that the ground was sufficiently covered with snow to allow travelling in dog-sledges. The festivities of Christmas were duly observed, and a dance was given at which were present sixty persons, forming a motley assemblage of Englishmen, Scotch highlanders conversing in Gaelic, French Canadians, Esquimaux, and Indians of four different tribes. In February, however, some fears began to be entertained of want of food; the stock of dried meat was expended, the fishing lines were unproductive, and the men were placed on short allowance. This distress, however, did not last long; a moose deer was killed which cost six days in hunting, the fisheries improved immediately after, and supplies arrived from the company's stations. In April, warm weather commenced, though the ground was still covered with snow; Dr. Richardson and Mr. Kendal completed the survey of Great Bear Lake, while the men at the fort were employed in building a large boat.

On the 22d of June the whole party embarked to fulfil the great object of the expedition. The weather was now warm, the thermometer standing at 71° in the shade. On the 4th of July they reached the fork or point where the principal mouths of the Mackenzie separate to run east and west. This point they therefore named *Point Separation*. Our travellers divided into two parties, to proceed, according to their instructions, one towards the east, the other to the west. "By six in the morning of the 4th of July, the boats

were all laden and ready for departure: it was impossible not to be struck with the difference between our present complete state of equipment and that in which we had embarked on our former disastrous voyage. Instead of a frail bark-canoe, and a scanty supply of food, we were now about to commence the sea voyage in excellent boats, stored with three months' provision. At Dr. Richardson's desire, the western party embarked first; he and his companions saluted us with three hearty cheers, which were warmly returned; and as we were passing round the point that was to hide them from our view, we perceived them also embarking."

Captain Franklin's party had hardly cleared the mouth of the river, and gained the sea, when they entered a wide bay, on the shores of which they perceived a party of Esquimaux: these soon came off to the boats in such crowds, that our travellers, after proceeding to seventy-three, desisted in despair from counting the canoes. Augustus, the Esquimaux interpreter, informed them that the strangers had no object in visiting that coast but to carry on trade. At this intelligence they testified the most extravagant joy; but the traffic carried on with them on this occasion rather tempted their cupidity than gratified their desires. The boats were aground though a mile from the shore, and were surrounded by nearly 300 Esquimaux. These, at first importunate and clamorous, became at length so emboldened as to attempt to steal from the boats. When detected and resisted, they grew furious, and seemed to be concerting measures for a simultaneous attack. They flourished their knives, and endeavoured to gain possession of the boats. For several hours this singular struggle continued, and terminated at length without the loss of blood on either side; the English having preserved their temper so as to refrain from using their fire-arms, while the Esquimaux, unwilling to hurt the strangers, aimed solely at becoming masters of their property. After the boats had escaped this danger, Augustus landed, to harangue the people on the impropriety of their conduct; they

welcomed him with songs and dances, which, he was surprised to find, were the same as those practised on similar occasions in his own country.

The boats now proceeded along the coast, with a fair wind, in a west-north-west direction; but they had not proceeded many miles before their progress was completely stopped by a sheet of ice, fastened to the shore, and extending to seaward as far as the eye could reach; and they now found that they had just arrived in time to witness the first breaking up of the ice. They drew up their boats on shore, therefore, as the delay of a few days seemed unavoidable. Here a party of Esquimaux soon made their appearance; but they were an inoffensive tribe, and jumped for joy when Augustus explained to them the advantages to be derived from an intercourse with white people, to whom they were now introduced for the first time. When awls and fishing-hooks were offered to them as presents, they stuck them in the septum of the nose as ornaments: these people had also holes pierced on each side of the under lip, in which were placed circular pieces of ivory, with a large blue bead in the centre, like the natives on some parts of the north-west coast of America. The men were taller and stouter than any tribes of the Esquimaux hitherto seen on the eastern coast, and their cheek bones were less projecting; but they had the general characteristic of their nation, the small eye and broad nose. They informed our travellers that, as soon as the wind should blow strongly from the land, the ice might be expected to be removed from the shore, so as to open a passage for boats, and that it would remain in the offing until the reappearance of the stars. Farther to the westward, they continued, the ice often adheres to the land throughout the summer; and when it does break away, it is carried but a short distance to seaward, and is brought back whenever a strong wind blows on the coast. If there be any channels in those parts, they are unsafe for boats, as the ice is continually tossing about. They expressed their wonder that the white men were not

provided, like themselves, with sledges and dogs to travel over the land whenever these interruptions should occur. Their houses are built of drift wood, which is found along this shore in abundance, brought by the current from the east. Some pine timber was found thirty-six feet in length and seven in girth.

As soon as the breaking up of the ice allowed our voyagers to embark, they struggled, not without difficulty and danger, to reach an island, which captain Franklin named from the philosopher Herschel. Here again they met with Esquimaux, who were provided in some measure with knives and other implements of iron. When interrogated as to the way in which they procured them, they replied, that they received them chiefly from a tribe of Esquimaux who reside a great distance to the west, and to whom they send their young men every spring, with furs, seal-skins, and oil, to trade for these articles. Some Indians also descend a river that enters the Polar Sea, nearly opposite Herschel Island, and carry on a similar traffic. These people supposed that the Indians and the Esquimaux, with whom they traded, obtained the goods from *Kabloonacht*, or white people, who dwell far to the west. Thus it appears that Russian manufactures are distributed among the Esquimaux to the east of the Mackenzie.

The shallowness of the shore, the great quantity of broken ice, and the thick fogs, greatly impeded the progress of the party, who now began to despair of being able to effectuate the object of their mission. A large river, flowing into the sea near the meridian of 141°, which separates the British and the Russian territories, was named the *Clarence River*. Here a box containing a royal medal was deposited, and the union jack being hoisted was saluted with three cheers. Farther on, another river was discovered, and named the *Canning River*. The water opposite to it was fresh three miles out to sea. The fogs now came on so thick as to compel the voyagers to draw their boats on shore, and wait till the

weather should clear up, so as to allow them to pursue their intricate navigation through the ice. This delay completely dissipated the hopes of ultimate success. It was now the 16th of August, and they had only reached half way to Icy Cape. Winter was rapidly advancing, and the temperature of noon was rarely above 37°. Captain Franklin resolved therefore to return immediately, rather than expose the lives of his followers in a hopeless enterprise. The last observation, made near *Return Reef*, was in lat. 70° 26′, long. 148° 52′. On the last day of the month, the boats reached Garry Island, and afterwards entered a fine river, which was supposed to be one of the mouths of the Mackenzie; nor was the mistake discovered until the voyagers had advanced so far as to have mountains on the eastward. This river, which captain Franklin named *Peel's River*, was from a quarter to half a mile in width: its banks, like those of the Mackenzie, were well clothed with poplar, birch, and willow. On the 21st of September our voyagers arrived at Fort Franklin, having accomplished in three months a voyage of 2048 miles. The extent of shore which they had traced to the westward of the Mackenzie was 374 miles; and in this whole length there was not a single harbour in which a ship could find shelter.

The progress of Dr. Richardson's party to the eastward was attended with much less difficulty. He was, perhaps, favoured by the current, which runs to the eastward, and had a bolder shore, with deeper water, and consequently less impeded with ice. He had also something to apprehend from the overwhelming numbers and turbulent manners of the Esquimaux: but he found them an intelligent and by no means a ferocious people; so that, when treated mildly and firmly, they laid aside all appearance of hostility. On one occasion they attempted to seize the boats, but at the sight of fire-arms desisted, and parted from the English, exclaiming, "Friendship is good!" Dr. Richardson received from the Indians and Esquimaux an account of

a great lake, extending about 150 miles from east to west, at no great distance from the shore, and about 140 from north to south: it is said to reach within four days' march of Fort Good Hope. Esquimaux Lake, as this extensive piece of water is called, is said to communicate with the Mackenzie, and to receive besides two other large rivers. It is reported also to be full of islands. Dr. Richardson's party followed the shores of two extensive bays, respectively named *Liverpool* and *Franklin Bays*. The eastern shore of the latter, as it ran a long way to the northward, caused them some anxiety; but on rounding Cape Parry, they again saw the coast trending to the south and east, as far as the eye could reach. As they approached the estuary of the Coppermine River, land was descried to the north, which filled them apprehensions, lest, joining with the continent of America, it might debar their farther progress; but as they advanced, they discovered that the land to the northward was unconnected with the main shore, from which it was separated by a channel from twelve to twenty miles in width. This island, the coast of which, apparently continuous, was observed for above 100 miles, received the name of *Wollaston Land*. On the 7th of August the boats had advanced so far in Coronation Gulf as to join the survey now made to that of the former expedition. The length of coast examined between the Mackenzie and Coppermine Rivers was 902 miles. The success which had hitherto attended the eastern detachment continued to the end; and on the 1st of September they reached Fort Franklin without an accident.

In order to complete, as far as possible, the survey of the northern shores of the American continent, government sent two expeditions to co-operate with those of captain Franklin and Dr. Richardson. On the 10th of June, 1824, captain Lyon sailed from England in the Griper, with instructions to winter in Repulse Bay, and in the ensuing spring to cross from the head of that bay to the northern shores of the American continent, which

he was to survey westward; so that his survey joined to that of Dr. Richardson might complete our knowledge of the shores of the Polar Sea, from their nearest accessible point to the mouth of the Mackenzie River. The whole voyage of captain Lyon was a continued struggle with bad weather. He arrived late in Sir Thomas Rowe's Welcome, in which, from the state of the sea, encumbered with ice, and adverse winds, he was unable to advance; and, after losing all his anchors, was obliged to relinquish the undertaking and return home.

Captain Beechey also, in the Blossom frigate, was ordered to winter in Kotzebue Inlet, and in the summer of 1826 to endeavour to find a passage eastward, round Icy Cape, so as to meet the expedition of captain Franklin, The ship, however, was prevented by ice from doubling Icy Cape; but Mr. Elson, the master, was sent in the barge, to prosecute the voyage as far as possible to the east. On the 22d of August, he arrived at a low, sandy point, on which the ice had grounded; and, as a compact field of ice extended northward as far as the eye could reach, Mr. Elson was obliged to relinquish all thoughts of proceeding farther. This point, which is the most northern part of the continent yet known, lies in lat. 71° 23′ 39″, and long. 154° 21′, which is 120 miles beyond Icy Cape. The coast examined by Mr. Elson was flat, abounding in lakes and rivers, and thickly inhabited by Esquimaux, whose winter habitations are close to the beach. The point from which captain Franklin commenced his return to the Mackenzie, on the 18th of August, is only 160 miles from the point reached by Mr. Elson four days later. Had captain Franklin been aware that by persevering in his exertions for a few days, he might have reached his friends, it is possible that a knowledge of the circumstance might have induced him, through all hazards, to continue his exertions. Thus, with the exception of this short space of 160 miles, a continuous line of coast has been explored, by British hardihood and perseverance, from Behring's Straits to long. 108°.

CHAP. XVII.

HUMBOLDT'S TRAVELS.

GEOGRAPHY ASSOCIATED WITH THE PHYSICAL SCIENCES. — HUMBOLDT'S EDUCATION. — HE PROJECTS VISITING EGYPT AND THE EAST. — PROCEEDS TO SPAIN. — ENCOURAGED TO VISIT THE SPANISH AMERICAN COLONIES. — HE ASCENDS THE PEAK OF TENERIFFE. — HE ARRIVES AT CUMANA. — THE EARTHQUAKES. — CARACCAS. — THE SHARKS. — HE CLIMBS THE SILLA OF CARACCAS. — VISIT TO THE LAKE OF VALENCIA. — VIGOUR OF VEGETATION. — THE MILK TREE. — JOURNEY ACROSS THE LLANOS. THE GYMNOTUS OR ELECTRICAL EEL; MODE OF TAKING THEM; THEIR POWER. — REMARKS ON THE CROCODILE. — HUMBOLDT ASCENDS THE ORONOKO. — THE MINGLED CLAMOUR OF WILD BEASTS. — THE CARIBITO. — VOYAGE THROUGH INUNDATED FORESTS. — DOLPHINS AMONG THE TREES. — VOYAGE DOWN THE RIO NEGRO. — HUMBOLDT DETERMINES THE POSITION OF THE JUNCTION OF THE AMAZON AND ORONOKO. — NAVIGATES THE CASSIQUIARE, WHICH CONNECTS THEM. — DESCENDS THE ORONOKO. — CATACOMBS OF ATARUIPO. — ARRIVES AT ANGOSTURA. — RETURNS TO CUMANA. — PROCEEDS TO THE HAVANNAH. — HIS OCCUPATIONS IN THAT PLACE.

We have seen the improvements in astronomy applied to correct the errors of geography, and, passing from the hands of the astronomer to those of the navigator, assisting to form an accurate delineation of the surface of the globe. But the relations which exist between geography and physical science in general still remained to be studied, and it was not till our own days that a traveller appeared qualified, by his ardour, his knowledge, and his talents, to enter upon so grand an undertaking. Alexander von Humboldt, the person to whom we allude, was born at Berlin, in 1769. He received his education at Göttingen and Frankfort on the Oder; he subsequently pursued his mineralogical studies at the celebrated school of Freiberg. He seems to have cultivated assiduously every branch of knowledge; but the ardour of learning

naturally attached him to the pursuits that were at that time most in vogue. Chemistry and the phenomena of animal electricity chiefly attracted his attention. As he possessed an ample independent fortune, he was able to add the accomplishment of travel to that of secluded study. He visited England and Holland in company with G. Forster and Van Geuns. Italy and Switzerland he visited with Von Hafter and Freiesleben. The conversation of these men determined the predilection which young Humboldt already evinced for the study of nature. In 1797 he went from Vienna with his brother William von Humboldt, a man of eminent learning and abilities, to Paris, where he formed an acquaintance with Aimé Bonpland, a young botanist of distinguished merit, with whom he concerted various plans of travel.

When the expedition of Baudin to the southern hemisphere was first projected, it was expected that Humboldt would accompany it; but the delays occasioned by the wars in which France was then involved wearied his patience, and fortunately rescued him from an expedition in which the naturalists eventually proved too many for the commander. He then thought of proceeding to Egypt, where he expected to meet a cordial reception from the body of scientific men which accompanied the French army. From Egypt he intended to cross through Arabia into Persia, and to proceed by that way to the British dominions in India. He waited two months at Marseilles for the sailing of a frigate which was to convey the Swedish consul to Algiers; but, tired of the delay, he proceeded to Spain, whence he expected to be able to cross without difficulty to Africa, and to continue his route to Egypt: but on his arrival at Madrid, in the beginning of 1799, the reception he met with at court, and in the literary and scientific circles of that capital, soon wrought an entire revolution in all his plans. He received, in short, permission from the Spanish ministers to travel through the Spanish colonies in America; so that an immense field was opened to the scientific traveller which had been before but superficially examined

On the 6th of June, 1799, he set sail from Corunna with his friend Boupland. At Teneriffe our travellers commenced their geological and botanical researches; they ascended the celebrated peak of Teyde, where they observed within a small compass, that geographical distribution of plants which it was their object to trace on a more comprehensive scale. The mountain which forms the island may be divided into five zones, distinguished by their vegetation. In the first, or zone of vines, which extends to the height of 1500 feet above the level of the sea, are to be found many tropical productions. Here are to be found the date tree, the plantain, the sugar cane, the Indian fig, the clove tree, mingled with the fruit trees of Europe. Here, also, the culture of the bread-fruit tree of Otaheite, of the cinnamon tree of the Moluccas, the coffee tree of Arabia, and the cocoa tree of America, have been tried with success. The second zone, which may be called that of the laurels, embraces the woody part of the island. Oaks, chestnuts, with a great number of beautiful evergreens, crown the hills which lead to the volcano. At the height of 5500 feet above the sea begins the third zone, which is entirely occupied by a vast forest of pines. The fourth and fifth zones, covered with alpine broom and herbaceous plants, occupy heights equal to the most inaccessible summits of the Pyrenees. Here begins the barren region of the peak, which has an extent of above nine square leagues. The lower regions viewed from this elevation shrink in the prospect, so that the island appears an immense heap of torrified matter, hemmed round by a scanty border of vegetation.

The Piton, or sugar loaf, which forms the summit of the peak, is a small cone covered with volcanic ashes and fragments of pumice-stone, so steep that it would be impossible to reach the top but for an old current of lava, the wrecks of which have resisted the ravages of time. By grasping these the traveller is enabled to scale the steep. On the summit of the Piton our travellers were surprised to find scarcely room enough to seat themselves

commodiously; the inconvenience they felt from the severe cold and the violence of the west wind was amply repaid by the richness, variety, and extent of the prospect before them. The transparency of the air allowed them to enjoy a landscape, far more comprehensive and exact than could possibly greet the eye in a colder climate. Nearly the whole of the archipelago of the Fortunate Islands may be seen in fine weather from the summit of the peak; and M. Humboldt calculates, that the eye takes in from this point a surface of the globe equal to one fourth of Spain. Our travellers reached the bottom of the *caldera* or crater without danger. It has been inactive, probably, for thousands of years, and in its present state is only a solfaterra, not much exceeding a hundred feet in depth; through the fissures in its sides there issued, nevertheless, hot vapours, which raised the thermometer placed in them to 160°. Our travellers descended in safety, bringing with them a bottle of air from the summit of the peak for chemical analysis.

In July they reached the port of Cumana in South America, in which place they employed some weeks in verifying their instruments, forming botanical collections, and examining the traces of the great earthquake of December, 1797. Humboldt determined, by astronomical observations, the longitude and latitude of Cumana which in most maps was placed at least half a degree too far to the south. Until the beginning of the present century the whole of the coast of Terra Firma has been laid down too far to the south: this was owing to the current near the Island of Trinadad, which, setting towards the north, caused an error in the reckoning of mariners, and led them to think themselves farther south than they really were. The greatest pleasure known at Cumana is that of bathing in the waters of the Manzanares, a lively limpid stream, that flows through the town. The mode of bathing is singular enough: — In a fine moonlight night chairs are placed in the water; the men and women are lightly clothed, as in some baths in

the north of Europe; and parties assembled in the river pass some hours in smoking cigars, and in conversation. The company are under no apprehensions from the bavas, or small crocodiles, which are now scarce, and rarely attack men. Dolphins, however, ascend the river in the night, and frighten the bathers by spouting water.

From the peninsula of Araya and the salt lagoons on the coast near Cumana our travellers proceeded to the missions of the Indians in the mountains of the interior, through forests of palm and arborescent fern. The thickness of the forests and the force of vegetation augmented as they approached the convent of the valley of Caripe, which is celebrated for the extraordinary coolness of the climate, and still more for the great *cueva*, or cavern of the Guacharo. In a country where the people love what is marvellous, a cavern that gives birth to a river, and is inhabited by thousands of nocturnal birds, the fat of which is employed in the missions to dress food, is an everlasting subject of conversation and discussion.

The cavern, which the natives call a *Mine of Fat*, is not in the valley of Caripe itself, but at three short leagues' distance towards the west-south-west. The Cueva del Guacharo is pierced in the vertical profile of a rock, forming a vault eighty feet broad and seventy-two feet high. The rock that surmounts the grotto is covered with trees of gigantic height. Various succulent plants rise from the driest clefts of the rock, while creeping plants, waving in the winds, are interwoven in festoons before the entrance of the cavern. This luxury of vegetation embellishes not only the outside of the vault, it appears even in the vestibule of the grotto. Plantain-leaved heliconias eighteen feet high, small palm trees, and arborescent arums, follow the banks of the river thirty or forty paces from the entrance. The travellers measured their way by means of a cord, and advanced about 430 feet without being obliged to light their torches. Where the light began to fail, they heard from afar the hoarse sounds of the nocturnal birds. The Gua-

charo is of the size of our fowls, of a dark bluish grey plumage, and resembling in its manners both the goat-sucker and the alpine crow; it is almost the only frugivorous nocturnal bird that is yet known; it quits the cavern at nightfall, especially when the moon shines. "It is difficult," says M. Humboldt, "to form an idea of the horrible noise occasioned by thousands of these birds in the dark part of the cavern, and which can only be compared to the croaking of our crows, which, in the pine forests of the north, live in society, and construct their nests upon trees the tops of which touch each other. The shrill and piercing cries of the guacharos strike upon the vaults of the rocks, and are repeated by the echo, in the depth of the cavern. The noise increased as we advanced, and the birds were affrighted by the light of torches of copal; when, as this noise ceased for a few minutes around us, we heard at a distance the plaintive cries of the birds roosting in other ramifications of the cavern."

"The Indians enter into the Cueva del Guacharo once a year, near midsummer, armed with poles, by means of which they destroy the greater part of the nests. At this season several thousands of the birds are killed; and the old ones, as if to defend their brood, hover over the heads of the Indians, uttering terrible cries. The young which fall to the ground are opened on the spot; their peritoneum is extremely loaded with fat, and a layer of fat reaches from the abdomen to the anus, forming a kind of cushion between the legs of the bird. At the period which is commonly called at Caripe the oil-harvest, the Indians build huts with palm-leaves, near the entrance, and even in the porch, of the cavern. There, with a fire of brushwood, they melt, in pots of clay, the fat of the young birds just killed. This fat is known by the name of butter or oil of the guacharo; it is half liquid, transparent, without smell, and so pure that it may be kept a year without becoming rancid." The members of an Indian family which bears the name of Morocoymas pretend, as descendants of the first colonists of the valley,

to be the lawful proprietors of the cavern, and lay claim to the monopoly of the fat; but the monks established among them pay little regard to the claims of the Indians, who are obliged to furnish oil for the church lamps.

The grotto of Caripe was examined by Humboldt to the distance of 1460 feet, and found in the whole of that extent to preserve the same direction, and nearly the same dimensions. Here the river forms a cascade, beyond which the Indians could not be persuaded to advance; but it was said at the convent, that a bishop of St. Thomas of Guiana had measured nearly 2500 feet from the mouth of the cavern to the place where he stopped, without, however, reaching its termination. These nocturnal birds have been found only on the mountains of Caripe and Cumana Coa.

Returning over the mountains of Santa Maria, and through the missions of Catuaro, our travellers arrived at the coast of Cumana. On the 4th of November, they experienced a smart shock of an earthquake, and had an opportunity of observing the singular atmospherical phenomena that accompany these convulsions. They then went by sea to Caraccas, where they arrived on the 21st of November. They were surprised to see, in the port of La Guayra, the free mulattoes and negroes, who were employed to lade the ships, wading up to their middles through the water, quite regardless of the sharks, which are numerous in this harbour. "This fact," says M. Humboldt, "seems connected with what I have often observed within the tropics, relatively to other classes of animals that live in society, for instance, monkeys and crocodiles, in the missions of the Oroonoko and the River of the Amazons. The Indians, who catch monkeys so seldom, know very well that they can easily succeed in taming those which inhabit certain islands; while monkeys of the same species, caught on the neighbouring continent, die of terror or rage when they find themselves in the power of man. The crocodiles of one pool in the llanos are cowardly, and flee, even in the water; while those of another attack with extreme

intrepidity. It would be difficult to explain this difference of manners and habits by the aspect of their respective localities. The sharks of the port of La Guayra seem to furnish an analogous example: they are dangerous and blood-thirsty at the island opposite the coast of Caraccas, while they forbear to attack persons swimming in the ports of La Guayra and Santa Martha. The people, who, in order to simplify the explanation of natural phenomena, have always recourse to the marvellous, affirm that in both places the bishop gave his benediction to the sharks."

The port of La Guayra is but three leagues from the town of Caraccas, which, though so near the sea, is situated on a table land, among the mountains, where the climate is so cool as to admit of the cultivation of wheat, if that of the coffee tree were not preferred. Humboldt ascended the double-peaked mountain called the Silla, or Saddle of Caraccas, which, though at but a little distance from the town, had never been climbed by any of the inhabitants. By this excursion, he enriched his botanical collection, and had an opportunity of repeating his observations on the transparency of the atmosphere and the refraction of light.

From Caraccas our travellers returned to Cumana through the mountains of Los Teques and along the fertile banks of the Lake of Valencia. This lake, called Tacarigua by the Indians, exceeds in magnitude the lake of Neufchâtel in Switzerland. The variety and luxuriance of the plants that adorn its banks form an irresistible attraction to a traveller who delights in studying the endless diversity of nature. The brilliancy of the picture here is enhanced by the contrast of vivid vegetable colours with the uniform tint of an unclouded sky. This lake is remarkable, not only for its picturesque beauties; but also for the gradual diminution of its waters,—an effect which philosophers differ in explaining. According to Humboldt, it may be ascribed to the destruction of wood in the neighbouring valleys, in consequence of which the climate is become

more dry; and the rivers, instead of copious streams, assume the character of brooks or torrents. From Porto Cabello, on the sea shore, our travellers prepared to cross the great llanos or steppes of Caraccas, which separate the chain of mountains which run along the coast from the valley of the Oroonoko. In passing a second time through the valleys of Aragua, they stopped at the farm of Barbula, to satisfy themselves by ocular examination respecting the truth of the accounts they had received of the *palo de vaca*, or cow tree, the milk of which the negroes were said to consider a wholesome aliment. They found by experience that the virtues of this extraordinary tree had not been exaggerated. The palo de vaca is a handsome tree, resembling the broad-leaved star apple: incisions are made in its trunk; it yields an abundance of glutinous milk, of an agreeable and balmy smell. This sweet and nourishing fluid flows most abundantly at the rising of the sun. The blacks and natives are then seen hastening from all quarters, furnished with large bowls, to receive the milk. M. Humboldt declares, that, in the whole course of his travels he never met any object which so strongly affected his imagination as the cow tree. This inestimable gift of nature seems peculiar to the cordilleras of the coast.

A descent of 1000 feet from the valleys of Aragua brought our travellers to the great steppes or desert that extends towards the Oroonoko. "I know not," says M. Humboldt, "whether the first aspect of the llanos excites less astonishment than that of the chain of the Andes." In these wide and dreary wastes every thing seems motionless. The plain seems to touch the sky, and resembles an ocean covered with sea weeds. The earth, wherever it was destitute of vegetation, was at the temperature of 120°: not a breath of air was felt, although whirls of dust continually arose amidst the apparent calm. In those llanos the level of the soil is so perfect, that often in the space of twenty square leagues there is not an eminence a foot high:

sometimes, however, banks of stones, four or five feet higher than the rest of the plain, are seen to extend three or four leagues in length. There is reason to believe that those plains have become more dry and desert since the discovery of America. Since the llanos have been inhabited, and stocked with cattle, the savannah is often set on fire, in order to ameliorate the pasturage: groups of scattered trees, beneath the shade of which vegetation enjoyed a protection from the scorching rays of the sun, are thus destroyed.

At Calabozo, in the llanos, our travellers had an opportunity of examining the great gymnotus, or electrical eel, which is found in abundance in the confluents of the Oroonoko. It was difficult, however, to procure the fish, as the Indians dread the shock which they are liable to receive in taking it. They believe, indeed, that the gymnoti may be touched with impunity by a man chewing tobacco; but their faith in this precaution is not practical. At length, it was proposed to "fish with horses," and, accordingly, the Indians set about this singular operation, by driving about thirty wild horses and mules from the savannah into a stagnant pool: the struggle which ensued is thus described by our traveller:—"The extraordinary noise caused by the horses' hoofs makes the fish issue from the mud, and excites them to combat: these yellowish and livid eels, resembling aquatic serpents, swim on the surface of the water, and crowd under the bellies of the horses and mules. A contest between animals of so different an organisation furnishes a very striking spectacle. The Indians, provided with harpoons and long slender reeds, surround the pool closely, and some climb upon the trees, the branches of which extend horizontally over the surface of the water: by their wild cries and the length of the reeds, they prevent the horses from running away, and reaching the bank of the pool. The eels, stunned by the noise, defend themselves by the repeated discharge of their electric batteries: during a long time they seem to prove victorious; several horses sink be-

neath the violence of the invisible strokes which they receive from all sides, in organs the most essential to life; and, stunned by the force and frequency of the shocks, disappear under the water: others, panting, with mane erect and haggard eyes expressing anguish, raise themselves and endeavour to flee from the storm by which they are overtaken: they are driven back, by the Indians, into the middle of the water; but a small number succeed in eluding the active vigilance of the fishermen: these regain the shore, stumbling at every step, and stretch themselves on the sand, exhausted with fatigue, and their limbs benumbed by the electrical shocks of the gymnoti."

In less than five minutes two horses were drowned; the eel, being five feet long, and pressing itself against the bellies of the horses, makes a discharge along the whole extent of its electric organ. The horses are probably not killed, but only stunned; they are drowned from the impossibility of rising amid the prolonged struggle of the other horses and the eels. When the gymnoti have expended their electric energy, they approach timidly the edge of the marsh, where they are taken by means of small harpoons fastened to long cords; when the cords are very dry, the Indians feel no shock in raising the fish into the air. In this manner several were captured, and carefully examined by our travellers. Some of these measured five feet three inches in length; and the Indians assert that they are sometimes seen of much greater length. The gymnotus is the largest of electrical fishes, and its electrical action is so powerful, that M. Humboldt says "that he does not remember to have ever received from the discharge of a large Leyden jar a more dreadful shock than that which he experienced by imprudently placing his feet on a gymnotus just taken out of the water."

Having determined by astronomical observations the position of Calabozo, they proceeded towards the Oroonoko. During the night they forded the Uritúcu, which is filled with a breed of crocodiles remarkable for their ferocity:

their boldness is the more striking, as the crocodiles of the river Tisnao, eight leagues distant, are timid and inoffensive. At San Fernando our voyagers embarked on the Apure to descend to the Oroonoko. The thick forests on the banks of the river were peopled by an innumerable quantity of birds of various kinds, which, when suddenly put to flight, darkened the air like clouds. The underwood grew close to the water's edge, so as to form a fence about four feet high, through which the wild quadrupeds of this country, the tigers, tapirs, and pecaries, have made paths to drink at the river. Here untamed and savage nature resumes its dominion. Wild animals of different kinds are seen to follow one another through every opening in the forest. The largest tiger our travellers had ever seen, and which surpassed in size the tigers of India exhibited in European menageries, was observed lying stretched beneath the shade of a large zainany. At sunset the howling monkeys commence their moaning, which may be heard at the distance of many miles. The other animals then take the alarm, and mingle their various cries in this savage concert; the howling of the tigers, the screams of birds, and the whistling of monkeys seem vying with each other to predominate in this terrible din. "When the natives are interrogated on the cause of this tremendous noise made by the beasts of the forest at certain hours of the night, they reply gaily, 'They are keeping the feast of the full moon.'"

The Apure, as well as the Oroonoko, is infested with crocodiles of great size; the species that is so abundant in these rivers is not a cayman or alligator, but a real crocodile, with feet dentated at the external edges analogous to that of the Nile. Some were seen measuring seventeen feet in length. There is a small fish, only four or five inches long, known in the country by the name of *caribe* or *caribito*, because no other fish has such a thirst for blood. It attacks bathers and swimmers, from whom it often carries away considerable pieces of flesh: when a person is only slightly wounded, it is dif-

ficult for him to get out of the water without receiving severer injury. These cruel and voracious fish live at the bottom of rivers; but if a few drops of blood be sprinkled on the water, they come to the surface in thousands. As no one dares to bathe where this fish is found, the caribito may be considered as one of the greatest scourges of those climates, in which the sting of the musquitoes and the irritation of the skin render the use of baths so necessary.

Having at length reached the Oroonoko, our voyagers commenced the descent of that noble river, which was in many places three miles wide, at a distance of 500 miles from the sea. They continued to descend this river till they reached the Temi, which flows into it from the south, and which is connected by a short portage with the Cano Pimichin, which flows into the Rio Negro. On the banks of the Temi the forests are often inundated to a great extent; and, to shorten the navigation, the Indians open channels among the trees four or five feet broad. Thus a part of the voyage was performed through a forest of stately trees, towering to the height of 100 or 120 feet. On beating the bushes, shoals of fresh water dolphins surrounded the boat, and swam across the forest, throwing out those spouts of compressed air and water which have procured them from seamen the name of blowers. This was a singular spectacle in the middle of the continent, 300 or 400 leagues from the mouths of the Oroonoko and Amazon. It was the labour of four days to drag the canoes over land to the Cano Pimichin, by which they descended into the Rio Negro, one of the tributaries to the Maranon, or River of Amazons. The object of our voyagers in making this laborious excursion, during which they suffered so much from the stings of musquitoes, the want of rest, and the confinement in a narrow canoe, was to ascertain, by astronomical observations, the position of the Cassiquiare, a branch of the Oroonoko which meets the Rio Negro, and thus establishes a communication between the former river and the waters of the Maranon.

They found that this junction, which is on the frontiers of Brazil and of the Spanish dominions, is situated two degrees to the northward of the equator; though it is generally supposed in the country to be placed directly on the equatorial line. Passing northwards up the Cassiquiare, our travellers again entered the Oroonoko, flowing here from the east, and would have sought the sources of that great river, but that the Guaica Indians, a fair-complexioned and warlike race, and the savage Guajaribes, a copper-coloured nation of cannibals, rendered the undertaking dangerous. They had now travelled 180 leagues in the boat, from San Fernando on the Apure to San Carlos on the Rio Negro; and on again entering the Oroonoko, they had to navigate 320 leagues to arrive at Angostura. In the course of their voyage down the river they visited the cavern of Ataruipo, situated in a shady and secluded spot, on the declivity of a steep mountain. This grotto is the tomb of a whole extinct tribe: 600 skeletons are seen here arranged in order, and perfectly well preserved; some being dyed red, and some, like real mummies, being varnished with odoriferous resins, and enveloped in leaves of the heliconia or plantain tree. At length they reached Angostura, wearied with the length of the voyage and with the inconveniences inseparable from river navigation in a sultry climate.

From the Oroonoko our voyagers returned to Barcelona and Cumana, through the missions of the Caraibe Indians, a tall and stately race of men, whose figure bespeaks that physical superiority which once rendered them formidable to the conquerors of the New World. From the coast they proceeded, through the southern parts of St Domingo and Jamaica, to Cuba. Here they employed themselves in contributing, by their knowledge of chemistry; to improve the process of manufacturing sugar; in surveying the coasts of the island; and in making astronomical observations.

CHAP. XVIII.

HUMBOLDT'S TRAVELS CONTINUED.

ARRIVAL OF HUMBOLDT AT CARTHAGENA. — VOLCANITOS OF TURBACO. — SANTA FÉ DE BOGOTA. — THE FALLS OF TEQUENDAMA. — NATIVE TRADITIONS. — VIEW FROM THE TABLE LAND. — NATURAL BRIDGES OF ICONONZO. — PASS OF QUINDIU. — MODE OF TRAVELLING ON MEN'S BACKS. — VISIT TO THE VOLCANO PURACE. — ARRIVAL AT QUITO. — VOLCANO OF PICHINCHA. — HUMBOLDT'S ASCENT OF CHIMBORAZO. — HE PASSES BY RIOBAMBA. — DESTRUCTION BY EARTHQUAKES. — CAUSEWAY OF YEGA. — HUMBOLDT DESCENDS THE RIVER OF AMAZONS. — OBSERVES THE MAGNETIC EQUATOR. — REPASSES THE ANDES. — TRUXILLO. — ARRIVES AT LIMA. — OBSERVES THE TRANSIT OF MERCURY. — PROCEEDS TO GUAYAQUIL. — SAILS TO ACAPULCO. — MEXICO. — MINES OF MORAN AND REAL DEL MONTE. — GUANAXUATO. — ACCOUNT OF JORULLO. — THE VOLCANOES OF PUEBLA. — THE COFFER OF PEROTE. — VERA CRUZ. — PHILADELPHIA. — RETURN TO EUROPE. — BONPLAND GOES TO BUENOS AYRES, — — IS CAPTURED AND DETAINED BY THE RULER OF PARAGUAY.

M. VON HUMBOLDT had promised Baudin, that, if ever the projected expedition destined for the southern hemisphere were put into execution, he would join it: accordingly, when a report reached him that the ships had sailed from France, with instructions to double Cape Horn and touch on the coasts of Chili and Peru, he immediately left Cuba to cross South America, in order to meet the French navigator. And it was not till he reached Quito, that he learned that captain Baudin's expedition had taken a different course, and was to circumnavigate the globe from west to east.

In March, 1801, Humboldt and his friend Bonpland arrived from Cuba at Carthagena, with the intention of ascending to Santa Fé de Bogota, the capital of New Granada, and to cross from thence to the elevated plains of Quito. But preparatory to this long journey, and to

avoid the heats of Carthagena, they resided at the beautiful village of Turbaco, which is situated among the hills, at the height of 1200 feet above the ocean. The Indians who attended our travellers in their herbalisations often told them of a marshy country, situated amidst a forest of palm trees, and called the *Little Volcanoes*. They related that, according to traditions still existing among them, this country had been formerly in flames; but that a very pious man had succeeded in extinguishing the subterraneous fire, by sprinkling it with holy water. From that time the fiery volcano had become a *volcan de agua*, or water volcano. Humboldt, well aware that the stories which the natives eagerly related, in order to draw the attention of strangers to the phenomena of nature, had more in them of superstition and exaggeration than of positive invention, suffered himself to be conducted by them to the Little Volcanoes, and was repaid by a spectacle more important than he could have expected.

The *Volcanitos*, or Little Volcanoes, are situated about two miles to the east of Turbaco, in a thick forest abounding with balsam of tolu trees. In the centre of a vast plain are eighteen or twenty small cones, in height from twenty to twenty-five feet: they are formed of a blackish-grey clay, and have an opening at their summits filled with water. On approaching these small craters, a hollow but very distinct sound is heard at intervals, a few seconds previous to the disengagement of a great quantity of air. The Indians assert that the forms of the cones undergo no visible change in a great number of years. The air disengaged was found to be azotic gas, much more pure than that which is generally procured in the laboratories of the chemist.

At Santa Fé de Bogota, which stands in a valley more elevated than the summit of St. Bernard, our travellers employed some months in studying the botanical riches of the country, its mineralogical structure, and its curiosities. The plain in which the city stands, though 8700 feet above the level of the sea, is surrounded by lofty

mountains, and has the appearance of having been at one time the bed of a great lake. The river of Funzha, commonly called the Rio Bogota, which collects all the waters of the valley, seems to have forced its way through the mountains to the south-west of Santa Fé. Near the farm of Tequendama this river rushes from the plains by a narrow outlet, which descends towards the basin of the river Magdalena, and were this passage closed, the whole plain of Bogota would be immediately converted into a sheet of water. The Indians, ready to ascribe a miraculous origin to whatever seems to be the work of contrivance, relate that Bochica, a hero of their race, broke asunder the rocks that enclose the valley, and thus drained the waters of the lake of Bogota. He then retired to the holy valley of Eraca, where he lived in the exercise of austere penitence for the space of 2000 years.

Although the cataract of Tequendama is not, as is commonly believed in Europe, the loftiest cataract on the globe, it yet forms an assemblage of every thing that is sublimely picturesque in beautiful scenery. There hardly exists a cataract which from so lofty a height precipitates so voluminous a mass of waters. A little above the fall the river is still 170 feet in breadth; but near the crevice, which appears to have been formed by an earthquake, it is not above forty feet wide. From this crevice the whole mass of waters collected in the valley of Bogota falls, in a double bound, to a depth of 600 feet. The column of vapour that rises from the fall is visible from Santa Fé, a distance of five leagues. The enormous mass of vapours which continually rises from the cataract, and which is precipitated by its contact with the cold air, contributes much, it is believed, to the fertility of this part of the plain of Bogota. As the river falls into the basin of the Magdalena, which flows through a warmer country, the vegetation at the foot of the cataract wears an appearance totally different from that of the plain above. The spectator on the heights, leaving behind him a plain rich in corn, and finding himself surrounded with oaks, elms, and other plants which recall to his mind

the vegetation of Europe, looks down, as from a terrace, on a country producing the palm, the banana, and the sugar-cane. A few palm trees have sprung up even at the very foot of the cataract.

On his journey from Santa Fé de Bogota, in September, 1801, Humboldt and Bonpland passed the natural bridges of Icononzo. The valley in which these are situated is one of the deep and narrow crevices, which are almost peculiar to the Cordilleras, and which, from their magnitude and abruptness, fill the soul with astonishment and terror. These narrow valleys are in many parts so deep, that were Vesuvius placed in their abysses, its summit would hardly exceed the ridge of the nearest mountains. A small torrent, called Rio de la Suma Paz, rushes from the eastern chain of the Andes, which in the kingdom of New Granada divides the basin of the Magdalena from the vast plains of the Meta, the Guaviare, and the Oroonoko. This torrent working its way through a crevice in the centre of the valley of Icononzo, or Pandi, could not, from the inaccessible nature of its bed, have been crossed without extreme difficulty, if nature had not provided two bridges of rock, which are justly considered in the country as among the objects most worthy the attention of travellers. The road, however, which conducts to these natural bridges, is one of the most dangerous and least frequented in the Cordilleras; and nothing but an enthusiastic love for the beauties of nature can induce travellers to give it a preference.

The torrent of the Suma Paz, after falling down two beautiful cataracts, enters a crevice, which was probably formed by an earthquake. A portion of the sandstone rock seems to have resisted the shock which rent the mountains, and now serves as a bridge to cross from one side of the valley to the other. This natural arch is nearly fifty feet long and about forty wide: its thickness in the centre exceeds eight feet; its height above the waters of the torrent is 400 feet. The Indians of Pandi have formed, for the safety of travellers,

who, however, rarely visit this desert country, a small balustrade of reeds, which extends along the road leading to the bridge. Sixty feet below this natural bridge is another, approached by a narrow pathway, which descends upon the brink of the crevice: here three enormous masses of rock have fallen in such a manner as to support each other; that in the middle forms the key of the arch. In the middle of the second bridge is a large aperture, through which the bottom of the abyss is perceived. The torrent seems to flow through a dark cavern, whence proceeds a lugubrious noise, caused by the nocturnal birds that haunt the crevice. Thousands of them are seen flying over the surface of the water. It is impossible to catch them, on account of the depth of the valley, and they can be examined only by throwing down rockets to illumine the sides of the crevice. The height of the natural bridge of Icononzo above the level of the sea exceeds 3000 feet.

The difficulties of the road, and the heavy rains, rendered the journey to Quito extremely fatiguing; yet our travellers allowed themselves but little time for repose. Their zeal to investigate the unexplored recesses of nature led them again into the valley of the Magdalena, and through the forests which clothe the sides of Quindiu, a mountain in the central Andes which surpasses the limits of perpetual snow.

The mountain of Quindiu is considered as the most difficult passage in the Cordillera of the Andes; it is a thick uninhabited forest, which, in the finest season, cannot be traversed in less than ten or twelve days. Not a hut is to be seen, nor can any means of subsistence be procured. Travellers at all times of the year furnish themselves with a month's provision; since it often happens that, by the sudden melting of the snows and the swell of the torrents, they are unable either to return or proceed. The highest point of the road over Quindiu is nearly 12,000 feet above the level of the sea. The pathway over the steeps is in many places not above a foot in breadth. The passage of the mountain of Quin-

diu, like that of many other parts of the Andes, is usually traversed on the backs of men: the traveller is seated on a chair, which is tied on the back of a *carguero* or porter. The occupation of the carguero, though ill recompensed, and exposed to enormous fatigue, is yet eagerly embraced by all the robust young men who live at the foot of the mountains. They prefer the wandering life and independence of a forest to the dull and sedentary vapours of cities. In some parts of South America, if a man grows so corpulent and heavy that he cannot find a carguero strong enough to carry him, he is, in consequence, deprived of the power of travelling beyond the limits of his native valley.

Humboldt and Bonpland, not choosing to travel on men's backs, preferred the alternative of walking bare-footed. This circumstance, with the necessity of fording torrents of icy water, rendered the journey extremely distressing. Their guides, before they entered the forests of Quindiu, plucked in the neighbouring mountains several hundred leaves of the vijao, a plant of the family of bananas: these leaves, about twenty inches long by fourteen in breadth, are covered with a peculiar varnish, that enables them to resist the rain during a long time. About a hundred-weight of these leaves is sufficient to cover a hut capable of containing six or eight persons. On entering the forest, a few branches lopped from the trees form the frame of a tent, which in a few minutes is covered with the leaves of the vijao; under these leafy tents, which remain perfectly dry amidst violent and incessant rains, our travellers spent some days in the valley of Boquia. The labours of the journey to Quindiu were amply repaid by the examination of the treasures which nature here unfolds. Here they found the palm tree, the trunk of which is covered with a vegetable wax, employed by the natives in the fabrication of tapers; here the peak of Tolina rises from forests in which the passion-flower assumes the character of a large tree, and the bamboo attains a gigantic size.

From these mountains they descended into the valley

of Cauca, towards the west; and, reposing themselves for a short time at Carthago, wandered through the province of Choco, a country remarkable for the quantity of platina which it yields. Passing by the gold mines of Quilichao, they ascended to Popayan, which, situated at the height of about 6000 feet above the level of the sea, enjoys a delicious climate, though not quite two and a half degrees from the equator. It is placed at the foot of the great volcanoes of Purace and Sotara, of which the former is among the highest summits of the Andes. The plain round the town is adorned with the most luxuriant vegetation; while beyond this rich verdure a chain of bleak and arid mountains, which seem to have been cleft asunder by earthquakes, surround the perpetual snows of the volcano.

The little village of Purace is celebrated for the beautiful cataracts of the river, which, from the acidity of its water, is named by the Spaniards Rio Vinagre. This small stream is warm towards its source, and probably owes its origin to the melting of the snows from the sulphur that burns in the interior of the volcano. It forms three cataracts, one of which exceeds 400 feet in height. The Rio Cauca is destitute of fish for four leagues after it receives the acid waters of the Rio Vinagre.

Our enterprising travellers ascended to the crater of Purace, which is filled with boiling water. They then crossed the desert cordilleras of Almaguer, and the high table-land of Los Pastos; and, after a laborious journey of four months, arrived at Quito at the commencement of the year 1802.

Here they devoted nearly nine months to researches into the monuments of the country, its vegetation, the structure of its colossal mountains, and its volcanoes. They formed an acquaintance with an accomplished young man, the son of the marquis of Selvalegre, who accompanied them in all their future journeyings through Peru and Mexico. Twice they climbed to the summit of the volcano of Pichincha, in the western Andes, where they repeated their experiments on the constitu-

tion of the air, on electrical, magnetic, and hygroscopic phenomena, and on the properties of the boiling water that filled the crater. They visited also the volcanoes of Antisana, Cotopaxi, Tunguragua, and Chimborazo; and Humboldt, who measured the heights of all these mountains, was led to conclude that many of them have sunk considerably since the middle of the last century; an opinion which coincides with the observations of the inhabitants. He also concluded that these different summits, far from being a group of distinct volcanoes, constitute a single swollen mass, or enormous volcanic wall, stretching from north to south, and occupying, with its crest, a surface of more than 600 square leagues. These lofty mountains, distant from each other as they seem to the eye of man, are, probably, but different conic openings of the same great vault.

In May, 1802, Humboldt ascended Cotopaxi, the loftiest of those volcanoes of the Andes which have undergone eruptions at recent periods. Its absolute elevation is 18,800 feet. Cotopaxi is the most dreadful volcano in the kingdom of Quito, and its explosions the most frequent and disastrous. The fragments of rock and the quantities of scoriæ which it has thrown over the neighbouring valleys, would alone be sufficient to make a considerable mountain. In 1738, the flames of this volcano rose more than 3000 feet above the brink of the crater. Its roarings have been sometimes heard at the distance of 200 leagues. Our travellers, when at the port of Guayaquil, fifty-two leagues distant from the crater, heard continually the thunders of the volcano, like the discharges of a great battery.

Cotopaxi is in its form the most beautiful of the colossal summits of the high Andes. It is a perfect cone covered with snow, which shines with dazzling splendour at the setting of the sun, when the shadows of the western Andes spread over the country at its feet. The snowy cone of Cotopaxi is six times higher than the cone which crowns the Peak of Teneriffe; and the crater appears to be surrounded by a circular wall, which, ex-

amined with a telescope, looks like a parapet. It is extremely difficult to reach the inferior limits of perpetual snows; and Humboldt, after a near examination of the cone, pronounces that it would be impossible to reach the edge of the crater.

On the 23d of June, in the same year, our enterprising travellers attempted to reach the summit of Chimborazo; and, although they suffered much from the severity of the cold and the extreme tenuity of the air, they succeeded in reaching a point more elevated than any yet attained by man. The ridge to which they climbed was 18,576 feet above the level of the sea, and 3485 feet above the point reached by Condamine in 1745. But the highest peak of Chimborazo, which a deep chasm in the snow hindered them from reaching, was still 1350 feet above them. In this elevated situation, while the blood rushed into their eyes and lips from the tenuity of the atmosphere, they made experiments on the inclination of the magnetic needle.

From Quito Humboldt and his companions directed their course to the River of Amazons, passing through Lactacunga, Hambato, and Riobamba; a country the face of which was totally changed by the earthquake of February, 1797, and the volcanic eruptions which took place at the same time; when torrents of mud and water, pouring down from the mountains, swept through the cultivated valleys, and destroyed about 40,000 of the inhabitants. At Loxa they spent some time in making researches concerning the trees of the neighbouring woods which afford Peruvian bark. They again ascended the high Andes to arrive at the river of Amazons: here the magnificent remains of the causeway of Yega, which conducts over the porphyritic ridges of the Andes from Cusco to Assonay, at a height of from 4000 to 6000 feet above the level of the sea, attracted their admiration. At the village of Chamaya they embarked on a river of the same name, which conducted them to the Maranon: this junction was astronomically determined; and Humboldt constructed a map of this great river,

founded on astronomical observations, from the point at which he entered it to the mouth of the Rio Napo, where the observations of Condamine had commenced. Thus a chasm in the correct geography of the interior of America was filled up. Bonpland employed himself during this voyage in increasing his botanical collections.

In returning to Peru, our travellers crossed, for the fifth time, the great chain of the Andes. In the course of this journey, in the seventh degree of south latitude, they determined the position of the magnetic equator, or the line in which the magnetic needle has no inclination. They also examined the rich silver mines of Hualguayoc, elevated more than 12,000 feet above the level of the sea. From Caxamarca, celebrated for its ruins, they ascended to Truxillo, in the neighbourhood of which the site of an ancient Peruvian city is marked by pyramids, under one of which an immense quantity of gold coin was discovered in the course of the last century. Crossing the deserts which run along the coast to the south of Peru, our travellers arrived at Lima, where Humboldt had the satisfaction of observing successfully a transit of Mercury.

In the commencement of 1803, our travellers proceeded to Guayaquil, where they were particularly struck with the vigour of tropical vegetation. From this port a voyage of thirty days brought them to Acapulco in New Spain. The immense quantity of local information which Humboldt collected during his residence of a year in this country, and which he has communicated to the world in his "Essay on New Spain," is a sufficient proof of his abilities and matchless industry. But, while pursuing his researches into the history and antiquities of Mexico, the character and language of its inhabitants, he still found time to study the natural phenomena presented to view in this interesting country, and to determine accurately the geographical position of its chief places. He examined, with the discerning eye of a disciple of Werner, the mines of Tasco, of Moran,

and Real del Monte. In 1803, the travellers proceeded to the southern part of the kingdom, and visited the mines of Guanaxuáto, which far surpass in riches those of Potosi. Two months were devoted to trigonometrical measurements and geological researches; they then descended to the plains of Jorullo, where they ascended the volcano of the same name, and examined its crater. The formation of this volcano is perhaps the most extraordinary physical revolution of which we can find a positive record in the annals of history. In the interior of the continent, thirty-six leagues from the sea coast, and more than forty-two leagues distant from any active volcano, there arose suddenly from the plain, on the 29th of September, 1759, a mountain of cinders and scoriæ, 1700 feet high, and surrounded by 1000 little cones, all throwing out flames at the same time. These small cones, varying from six to nine feet in height, extend over a space of eighty square miles: they are so many funnels, exhaling a thick vapour, and communicating insupportable heat to the surrounding air. The country in the neighbourhood is remarkably unhealthy.

From the fruitful country of Mechoácan they returned to Mexico through the high plains of Toluca: here they saw a remarkable tree, the *Cheirostæmon*, which is supposed to be the only tree of its genus in existence. In Mexico they employed themselves in arranging their collections of plants and geological specimens, in calculating their astronomical observations, and in constructing the geological atlas for which they had collected materials. They left this city in January, 1804, to examine the eastern slope of the Cordilleras: here they measured geometrically the heights of the two volcanoes of Puebla, Popocatépetl and Itzaccihuatl. The first of these is constantly active, though for many centuries it has thrown out nothing from its crater but smoke and ashes: it is 2000 feet higher than the loftiest summits of Europe, and is itself the highest mountain in New Spain. The quantity of snow that had lately fallen did not prevent Humboldt from ascending the summit of

the Cofre, which is above 1300 feet higher than the Peak of Teneriffe. The summit of this mountain commands a very extensive and varied prospect over the plain of Puebla, and the eastern slope of the Cordilleras of Mexico, covered with thick forests of liquidambar, arborescent ferns, and sensitive plants. Our travellers could discern from it the harbour of Vera Cruz, the castle of St. John of Ulloa, and the sea coasts. This mountain has its name of Cofre, or Coffer, from a naked pyramidal rock which towers on its summit to the height of 400 or 500 feet; and, rising from amidst a forest of pines, has at a distance a singular and picturesque effect. The peak of Orizana was also accurately measured.

After an agreeable residence in these elevated plains, our travellers descended to the port of Vera Cruz, and fortunately escaping the dreadful fever which raged there at the time, arrived in safety at the Havannah, where in 1800 they had deposited a large portion of their collections. After remaining here two months, they set sail for Philadelphia, where they passed some weeks in studying the political character of the United States, and in August, 1804, they returned to Europe. Their collections, mineralogical and botanical, reached Europe in safety, with the exception of a very small portion embarked in 1800, which was lost by shipwreck: the collection of plants, which is chiefly due to the indefatigable zeal of Bonpland, comprises 6300 species.

Bonpland on his return was appointed by Napoleon to the honourable office of superintending his gardens at Malmaison. In 1818 he went to Buenos Ayres as professor of natural history. He undertook, in October 1820, an excursion up the Parana to the interior of Paraguay; but when he arrived at St. Anne, on the eastern bank of the river, where he had established a colony of Indians, and made a plantation of the tea plant, he was on a sudden surrounded by 800 soldiers, sent by Dr. Francia, the ruler of Paraguay, who destroyed his plantation, and carried him off a prisoner. He was confined chiefly in Santa Maria, and though allowed to

practise as a physician, was not permitted to quit the fort. The only reason assigned for his captivity was his having ventured to plant the tea tree, which furnishes to Paraguay a valuable article of export. Humboldt wrote in vain to Dr. Francia to procure the liberation of his friend; and under the ministry of Mr. Canning, the British envoy at Buenos Ayres was employed to exert his influence for the same purpose. These efforts seemed unavailing; but it has been lately said that Bonpland has obtained his liberty, and that he may be shortly expected in Europe with a large accession to the Flora of South America.

Humboldt, in the course of his travels in South America, determined astronomically the position of more than 300 places; but he aimed at something more than merely correcting the maps of that country: his observations extended to every department of natural history and physical science; while at the same time he studied with discerning eyes the characters of the people and of their political institutions. No other individual has ever contributed so largely to physical geography, or collected such a number of observations which tend to elucidate the natural history of our globe. His talent as a writer is fully equal to his industry as a collector: his speculations are bold and ingenious: he does not pedanticly shun theories which rest on grounds too conjectural to flatter a dogmatic spirit, nor, in canvassing questionable opinions, does he affectedly incline to the sceptical side as the least vulgar: his writings display the unrestrained workings of a well-informed and active mind, united to a sincere and ardent love of truth. In 1818 this celebrated traveller contemplated a scientific journey to Thibet and the East Indies, and was liberally supplied by the king of Prussia with instruments, and the funds which his plans rendered necessary; but this design was laid aside, and he contented himself with a visit to the Ural Mountains, the results of which are not yet made public.

CHAP. XIX.

SOUTHERN EXTREMITY OF AMERICA.

PARAGUAY. — AZARA SURVEYS THE FRONTIERS. — THE PAMPAS OF BUENOS AYRES. — JOURNEY OF CAPTAIN HEAD. — DESCRIPTION OF THE PLAINS. — FORMIDABLE GROWTH OF THISTLES. PROJECTED COLONY OF THE SPANIARDS. — FALKNER'S ACCOUNT OF PATAGONIA AND THE PAMPAS. — SANDY DESERTS. — THE NATIVE INHABITANTS. — THEIR ROVING HABITS. — THEIR STATURE. — THE COASTS OF PATAGONIA SURVEYED BY THE SPANIARDS. — THE SURVEY OF CAPTAIN KING. — ITS RESULTS. — THE NEW SOUTH SHETLANDS DISCOVERED. — VOYAGE OF MR. WEDDELL. — HE EXAMINES THE NEW SOUTH SHETLANDS. — REACHES A HIGH LATITUDE. — THE NEW ORKNEYS. — NEW GEORGIA. — ITS APPEARANCE. — THE SEAL FISHERY.

THE avidity for gold which actuated the first conquerors of America, and their ignorant belief that every spot that was secluded or difficult of access was the repository of nature's treasures, led them very soon into almost every recess of the South American continent. The same regions have been repeatedly viewed by modern travellers, who have surveyed them with more discerning eyes, and have added much to the information acquired by those who preceded them. The writings of Ulloa, Barrière, Luccock, Koster, Mawe, Helm, and others, all contain valuable information respecting the tropical regions of South America. But the analysis of these writers lies beyond the compass of a work the object of which is rather to trace the steps by which we first obtained a knowledge of the globe, than to follow through all its vicissitudes our progressive acquaintance with it.

The labours of Humboldt and of the Spanish hydrographers have contributed much to correct the map of the equatorial regions of America. The disputes also in which the courts of Lisbon and Madrid were for some time engaged respecting the southern limits of

Brazil gave rise to enquiries calculated to improve geography. In 1781, don Felix de Azara was sent by the Spanish government with some other officers to determine on the spot with the Portuguese commissioners the boundaries of their respective dominions. The execution of the treaty agreed on between the two courts was embarrassed and retarded by the evasions of the Portuguese; but Azara, a man of an active spirit, and a good naturalist, was in the mean time usefully employed in exploring a part of the Spanish dominions but little known. He constructed good maps of the La Plata and its tributaries; he also wrote an account of Paraguay, dry and unsatisfactory in a geographical point of view, but valuable from its contributions to natural history. Paraguay, which was at that time immediately under the jurisdiction of the viceroy of Buenos Ayres, had lost the prosperity which it seemed to enjoy under the management of the Jesuit missionaries. The Indian nations deserted a country in which they were no longer regarded as creatures of importance. If the Jesuits treated them as children, the Spanish officers used them as slaves. The population and produce of Paraguay in consequence declined, and that country, when visited by Azara, did not awaken the same degree of curiosity which it does at present, when raised into an independent state by an extraordinary revolution. On the breaking up of the Spanish dominions in America, Paraguay separated from Buenos Ayres, and has since remained under the government of don Jose Gaspar Rodriguez de Francia, who styles himself director: he is assisted in council by forty-two representatives chosen by the people, but in reality he exercises an arbitrary power. Dr. Francia is a Creole, whose notions of government are evidently derived from the lessons of the Jesuits: his boldness, however, fits him to be the ruler of a semi-barbarous people. In April, 1827, the independence of Paraguay was acknowledged, and the government of Dr. Francia recognised in a solemn treaty, by the emperor of Brazil.

The southern portion of the American continent,

from the limits of the province of Buenos Ayres to the Straits of Magellan, has been but little visited, and has met with comparatively few historians; nor was its hydrographical outline known even with tolerable correctness till the present time.

The Pampas, or great plains to the west and south of the La Plata, are vividly described in the "Rough Notes" of captain Head. This gentleman being chosen to take the management of an association formed to work the gold and silver mines of the provinces of Rio de la Plata, travelled across the great plains of the Pampas to the gold mines of San Luis, and from thence to the silver mines of Uspallata which are beyond Mendoza, about 1000 miles from Buenos Ayres. Having left his party of miners and surveyors at Mendoza, he rode back on horseback to Buenos Ayres by himself, performing the distance over the plains in eight days. He soon after found it necessary to repair to Chili, and again crossing the Pampas, passed over the Andes to Santiago, and travelled about 1200 miles through the mountains of Chili to visit gold and silver mines, and then re-crossing the Cordilleras, rode back over the plains to Buenos Ayres. "It was highly desirable," says captain Head, "that I should go from place to place as rapidly as possible; and for upwards of 6000 miles I can truly declare that I was riding against time."

The following is captain Head's lively and perspicuous description of the great level country over which these galloping journeys were performed:—"The great plain or Pampas on the east of the Cordilleras, is about 900 miles in breadth, and the part which I have visited, though under the same latitude, is divided into regions of different climate and produce. On leaving Buenos Ayres, the first of these regions is covered for 180 miles with clover and thistles; the second region, which extends for 450 miles, produces long grass; and the third region, which reaches the base of the Cordilleras, is a grove of low trees and shrubs. The second and third of these regions have nearly the same appearance through-

out the year; for the trees and shrubs are evergreens, and the immense plain of grass only changes its colour from green to brown; but the first region varies with the four seasons of the year in a most extraordinary manner. In winter, the leaves of the thistles are large and luxuriant, and the whole surface of the country has the rough appearance of a turnip field. The clover in this season is extremely rich and strong; and the sight of the wild cattle grazing in full liberty on such pasture is very beautiful. In spring the clover has vanished, the leaves of the thistles have extended along the ground, and the country still looks like a rough crop of turnips. In less than a month the change is most extraordinary: the whole region becomes a luxuriant region of enormous thistles, which have suddenly shot up to a height of ten or eleven feet, and all in full bloom: the road or path is hemmed in on both sides; the view is completely obstructed; not an animal is to be seen; and the stems of the thistles are so close to each other, and so strong, that, independent of the prickles with which they are armed, they form an impenetrable barrier. The sudden growth of these plants is quite astonishing, and though it would be an unusual misfortune in military history, yet it is really possible that an invading army unacquainted with this country, might be imprisoned by these thistles before they had time to escape from them. The summer is not over before the scene undergoes another rapid change: the thistles suddenly lose their sap and verdure; their heads droop, the leaves shrink and fade, the stems become black and dead, and they remain rattling with the breeze one against another, until the violence of the pampero or hurricane levels them with the ground, where they rapidly decompose and disappear: the clover rushes up, and the scene is again verdant." The vast region of grass in the Pampas for 450 miles is without a weed; and the region of wood is equally extraordinary: the trees are not crowded, but in their growth such beautiful order is observed, that one may gallop between them in every direction. The climate of the

Pampas is subject to a great difference of temperature in winter and in summer. In winter it usually freezes at night; but the ice is seldom more than one tenth of an inch thick: on the other hand, the summer heats are excessive, and the climate of the Pampas may be pronounced much hotter than that of the countries in the south of Europe, Greece, Sicily, Malta, &c., which are equally distant from the equator. In the eastern part of the plain, or in the region of thistles and clover, the atmosphere is always humid; but this dampness, which is most observable in Buenos Ayres, does not appear to be injurious to health, and, according to captain Head, "the whole of the Pampas may be said to enjoy as beautiful and salubrious an atmosphere as the most healthy parts of Greece or Italy, and without being subject to malaria. The only irregularity in the climate is the pampero, or south-west wind, which, generated by the cold air of the Andes, rushes over these vast plains with a velocity and violence which it is almost impossible to withstand; but the weather after one of these tempests is always particularly healthy and agreeable."

In 1778 the Spanish government entertained the design of colonising the coasts of Patagonia; and a great many families were sent for that purpose to America. They were received in the first instance in the ports of Monte Video, Maldonado, and San Sacramento; from which places they were to be distributed in the new settlements on the coast as circumstances might dictate. Azara was appointed to examine the coast southward of the La Plata, that he might select the most fertile and defensible positions for the new settlements. The whole scheme, however, was frustrated by the indolence of the viceroy or his aversion to the plan. Azara, whose chief attention had been turned to the Portuguese frontiers, perhaps contributed also by his advice to alter the destination of the emigrants, who were finally settled on the borders of Brazil, near the sources of the Ybicui, where they built a town called Esperanza.

The best account which we possess of Patagonia, or the Indian country from the La Plata to the straits of Magellan, is that written by Falkner, a naval surgeon, who, being converted by the Jesuits, spent nearly forty years in that country. On the Spanish frontiers the country, he tells us, is low and level, covered with long marshy grass, and abounding in armadilloes, deer, ostriches, and wild horses: in the woods there are both lions and tigers. These woods in some places reach within two leagues of the sea coast, which is extremely low, and so boggy as to be quite impassable. The first mountains met with in travelling to the south rise about six leagues from the sea coast, and run about forty leagues to the westward. They spring almost perpendicularly from the plain, and are covered with grass to within a few yards of the top, where they display a parapet of naked rock. The summits of these mountains are small table lands, to which the Indians resort to catch wild horses, first stopping up the narrow defiles by which the animals might escape to the lower plains. Beyond these mountains is a vast sandy desert, called by the Indians Huecuvu Mapu, or the devil's country, which they never cross, as, if a wind should arise, they might be overwhelmed and buried in the sands. The Casuhiti Mountains, on the north side of the Red River, is the beginning of a great alpine chain connected with the Cordillera of Chili, branches of which extend as far as the Straits of Magellan. The Casuhiti itself is the highest part of the range, and some peaks of it are clad in perpetual snow. Numerous great rivers flow into the Atlantic from these mountains: the chief of these are the Rio Colorado, or Red River, and the Rio de Sauces, or Willow River, more commonly called the Black River. The floods of this river, according to Falkner, are singularly violent when the rains and melted snow pour down the western side of the Cordilleras, as it receives all the streams that descend from above 700 miles of mountains. From about twenty leagues to

the south of the Black River, all the sea coast to the straits of Magellan is a dry barren country, without inhabitants, and roamed over by only a few guanacoes that sometimes descend from the neighbouring mountains to the west. It has no water for a great part of the year, and what it has is to be found only in the lakes after great rains. In the wet season the Indians descend to this country to bury their dead, to visit the sepulchres, and to collect salt in Port St. Julian or on the sea coast. The territory occupied by the Indian tribes to the west of this uninhabited country consists, as Falkner was informed, of vales enclosed in low ridges of mountains, watered with springs and brooks, which are swallowed up in small lakes that are dry in summer; so that in that season the natives usually migrate to the banks of some of the great rivers to the north. From the borders of Chili southwards to the Magellanic Straits the country is by all accounts mountainous, bleak, barren, and destitute of all the common necessaries of life; yet it appears from the testimony of Byron and other navigators, that many spots in the straits of Magellan are adorned with a luxuriance of vegetation that speaks favourably for the soil as well as climate. In the interior the mountains, it is said, are covered with wood, and even with timber of good size. Falkner received from the Indians an account of a tree called by them *lahual*, and supposed by him to be a species of *fir*: it is remarkable for the facility with which it may be split into boards, its trunk being naturally marked with straight lines from top to bottom, so that it may be divided into planks of any thickness by means of wedges, in a better and smoother manner than with a saw.

The nations of Indians who inhabit these countries bear among themselves the general denominations of *Moluches*, or warriors, and *Puelches*, or easterns. Of the former nation, the *Picunches*, or those who dwell in the mountains to the north, are, according to Falkner, "the most valiant and biggest bodied men of all the Moluches." From one of their tribes inhabiting

Arauco, the Spaniards have erroneously given the name of Araucanos to all the Indians of Chili. This nation, celebrated for its courageous resistance to the Spaniards, and immortalised by the verses of Ercilla, is now dwindled to a mere handful of men, in consequence of its frequent hostilities with the Spaniards, and still more from the immoderate use of brandy, which the Europeans have found a more powerful means than the sword of extirpating the aboriginal inhabitants of the country.

Of the Puelches, or eastern people, one tribe bears the name of *Tehuelhets*, or, more properly, *Tehuel-Kunny*, that is, southern men. These are the people known to Europeans by the name of Patagonians. They are a nomade nation, living chiefly on guanacoes, hares, and ostriches, which their country affords, and on mares' flesh when they can get it. They wander from the Straits of Magellan to the Pampas of Buenos Ayres, a distance of nearly 400 leagues. "The Patagonians, or Puelches," says Falkner, with great simplicity, "are a large bodied people, but I never heard of that gigantic race which others have mentioned, though I have seen persons of all the different tribes of southern Indians." Yet in the sentence preceding this he gives a description of the cacique Cangapol, a well proportioned gigantic chief, named by the admiring Spaniards the Cacique Bravo. Falkner says, "He must have been seven feet and some inches in height, because on tiptoe I could not reach the top of his head. I was very well acquainted with him, and went some journeys in his company. I do not recollect ever to have seen an Indian that was above an inch or two taller than Cangapol." Again, he informs us, "that the stature of the Tehuelhets rarely exceeds seven, and often not six feet." These Indian nations, of whose courage and kindness of disposition Falkner speaks in strong terms, threatened Buenos Ayres in 1767 with an army of 4000 men; and there can be little doubt that, if well armed, they would soon reinstate themselves in the dominion of those plains of which the Spaniards have dispossessed them.

The coasts of Patagonia were surveyed in 1782 by the Spaniards, whose chief attention nevertheless was directed to the careful examination of the Strait of Magellan. An opinion existed at that time that another navigable channel might be found still farther to the north; many inlets existing on the western coast of Patagonia which had never been explored, whilst the eastern coast was almost quite unknown. The result of the Spanish survey, however, ascertained the continuity of the land on the western coast; it also confirmed the opinion of the old navigators, that Tierra del Fuego, though marked in the maps as one island, is in reality a group of many. Again, in 1826, captain King, who had acquitted himself with such ability in surveying the coasts of New South Wales, was sent to examine carefully the coasts of Patagonia and Tierra del Fuego. It is hard to conceive a more dangerous and laborious task than that of surveying a broken and intricate coast, in the most stormy region of the world. Captain King, however, completed his survey without any accident, and in a manner highly creditable to his zeal and hydrographical science.

The Spanish survey was found to be erroneous in many important particulars. The western coast of Patagonia is bordered by a great chain of islands, the wide channels between which formerly gave rise to the delusive hope of finding a channel communicating with the Atlantic; but the continuous line of coast to the rear of those islands in the Spanish charts was found by captain King to be not the main land, but another range of islands, equal in breadth to the archipelago laid down in former maps. He also found that Tierra del Fuego is intersected by a fine navigable channel, running nearly east and west, with hardly any winding, and which he named, from his little vessel, the *Beagle Channel*. The security with which these surveys must inspire seamen, by teaching them to what harbours they may run for shelter, cannot fail to have a powerful influence on navigation. The passage round Cape Horn

has been long viewed with no small dread. Mariners were afraid to approach a broken, rocky shore, on which the sea appeared to break with more than ordinary violence. When the wind blew strongly from the west, they were obliged to run for shelter to some harbour on the coast of Patagonia. But danger disappears before the light of knowledge; and the seaman furnished with good maps, if surprised by adverse gales off Cape Horn, may now be sure of finding good shelter and anchorage, without deviating very widely from his course.

After the voyage of Cook in 1774, antarctic discoveries seem to have lost all their interest. But, in the year 1818, Mr. William Smith, commander of the brig William, on his voyage from Monte Video to Valparaiso, in latitude 62°, discovered what appeared to him a long line of coast: in the following year he approached it close enough to ascertain that it was land. It was barren, and covered with snow, but seals were in great abundance on its shores. Mr. Smith having communicated his discovery to the commander of the Andromache frigate then stationed at Valparaiso, Mr. Barnesfield was sent to make a survey of those coasts. He found the *South Shetland Islands*, as this group has been called, to consist of twelve main islands, and innumerable rocks above water, extending between lat. 61° and 63° S., and long. 54° and 63° W. These islands are almost totally without vegetation; but the large species of seal called the sea elephant was found in vast numbers. The fur seal, which was supposed to be found only in the South Sea, is still more numerous. The facility of obtaining here a cargo of valuable seal-skins was a temptation to mercantile enterprise which no dangers could counteract; and the South Shetlands were immediately visited by shipping, although there was as yet but little acquaintance with their coasts. The seals, unused to be disturbed, had no apprehension of danger, and would lie still while their neighbours were killed and skinned. The males of the sea elephant are monstrous animals; sometimes not less than twenty-four feet

long and fourteen in circumference, the females are about one third less. When the males first arrive on shore, the fat of three or four of them will make a tun of oil. The quantity of seals taken off the New Shetland Islands by trading vessels, during the years 1821 and 1822 may be computed at 320,000; and the quantity of sea elephant oil at 940 tuns. But, by the indiscriminate manner in which the females who had come on shore to breed were killed, the fishery proved unprofitable after the second year; though it is calculated that the shores of the New Shetlands could supply 100,000 furs annually, if the seal fishery were under proper management.

Among those who visited the South Shetlands, at the commencement of this trade, was Mr. Weddell, a master in the royal navy, who has written an unpretending volume, which affords as unequivocal proof of his ability, as his voyages do of his courage and seamanship. On the 17th of December, 1822, Mr. Weddell sailed from the Downs in the brig Jane, of 160 tons, accompanied by the cutter Beaufoy, of 65 tons, commanded by Mr. Matthew Brisbane. These two little vessels were destined for the South Seas, on an adventure, to collect fur seal-skins, and were provisioned for two years. A voyage of such length and danger, undertaken in such small vessels, and conducted with so much boldness, reminds one of the time of the Drakes, the Frobishers, and Davises. After reposing a little in Port St. Elena on the coast of Patagonia, Mr. Weddell ran to the south-east in the beginning of January, 1823; and on the 12th of that month came within sight of the *South Orkneys*, a group of islands situated nearly at 61° S., long. 45° W., discovered by himself in the preceding year. This coast, he says, is, if possible, more terrific in appearance than South Shetland; the icebergs, which form in the bays in winter, break off in summer and form drift ice, which threatens continual danger to shipping. The tops of the islands terminate, for the most part, in craggy towering peaks, and look not unlike the

mountain tops of a sunken land. The boats coasted these islands for more than fifty miles; but seals being few, and the weather thick and boisterous, the ships left these shores. Mr. Weddell now determined to run to the southward until he reached the latitude of 70°. Ice islands were numerous; and, about 68° 30′ they were so close together that it was almost impossible to pass through them; but in 70° 26′ ice islands disappeared, and the weather became pleasant; great numbers of birds flew round the ship, and whales were seen sporting in the water. As our navigators proceeded south, the weather grew still milder, whales were more numerous, the sea was literally covered with birds of the blue petrel kind, and not a particle of ice of any description was to be seen. Under these favourable circumstances, Mr. Weddell was hourly in expectation of discovering land ahead; but it was now the 20th of February, the close of summer in those latitudes: he was in long. 34° 16′ 45″, and had already reached the latitude of 74° 15′, when, the wind blowing fresh from the south, he felt that it would be imprudent to persevere in holding his course any farther in that direction. "I would willingly," he says, "have explored the south-west quarter; but, taking into consideration the lateness of the season, and that we had to pass homewards through 1000 miles of sea strewed with ice islands, with long nights, and probably attended with fogs, I could not determine otherwise than to take advantage of this favourable wind for returning."

In this voyage, Mr. Weddell penetrated within the antarctic circle 3° 5′ or 214 miles farther than captain Cook or any preceding navigator. This part of the ocean, heretofore unexplored, was named by him *George the Fourth's Sea*. It deserves to be remarked, that he did not find the difficulties arising from ice increase as he proceeded southward; on the contrary, he found all the appearance of a deep sea, a milder temperature, and an open ocean. He found, also, that the compass manifested the same sluggishness in a high southern lati-

tude, which captain Parry had the opportunity of observing in his voyages in search of a north-west passage.

The little vessels of our navigators being separated by violent gales, repaired to South Georgia, which had been appointed as the rendezvous. This island is about ninety-six miles long, with the mean breadth of about ten: its shores are deeply indented, affording numerous coves and secure harbours. The mountains are lofty, and perpetually covered with snow; but the valleys, during the summer season, display an abundant though homely vegetation. The only natural production of the soil is a strong coarse grass, in general about two feet high, and growing in tufts. South Georgia was discovered by La Roche in 1675, but it was not explored, nor its position fixed, till the voyage of captain Cook in 1771. "I need not remind the reader," says Mr. Weddell, "of the great advantages which navigation, and geography in general, have acquired from the discoveries and investigations of that able navigator; but the public may not be aware of the great extent in which his researches, in the south in particular, have been beneficial to Great Britain.

"His official report regarding the island of South Georgia, in which he gave an account of the great number of sea elephants, called by him sea lions, and fur seals, found on the shores, induced several enterprising merchants to fit out vessels to take them; the elephants for their oil, and the seals for their skins. These animals are now almost extinct; but I have been credibly informed, that since the year they were known to be so abundant, not less than 20,000 tuns of the sea elephant oil has been procured for the London market. A quantity of fur seal-skins were usually brought along with the cargo of oil; but formerly the furriers in England had not the method of dressing them, on which account they were of so little value as to be almost neglected.

"The number of skins brought off from Georgia by ourselves and foreigners cannot be estimated at fewer than 1,200,000. I may here also remark, that the

Island of Desolation, which captain Cook likewise visited, and first made known, has been a source of scarcely less profit than the Island of Georgia: hence it may be presumed, that during the time these two islands have been resorted to for the purpose of trade, more than 2000 tons of shipping, and from 200 to 300 seamen have been employed annually in this traffic."

CHAP. XX.

EASTERN SHORES OF ASIA.

PROGRESS OF THE RUSSIANS. — VOYAGE OF BILLINGS FROM THE KOLYMA. — HE MEETS WITH LEDYARD. — HE VISITS THE ALEUTIAN ISLANDS. — JOURNEY THROUGH THE COUNTRY OF THE TSHUKTSKI. — BARON WRANGEL. — THE JAPANESE SEAS UNKNOWN. — LABOURS OF BROUGHTON. — RUSSIAN EMBASSY TO JAPAN. — VOYAGE OF KRUSENSTERN. — ILL SUCCESS OF THE MISSION. — THE SURVEY CONTINUED. — SAGALEEN. — GOLOWNIN PROCEEDS TO EXAMINE THE KURILE ISLANDS. — TAKEN PRISONER BY THE JAPANESE. — HIS DESCRIPTION OF MATSMAI. — HE EFFECTS HIS ESCAPE. — RETAKEN, AND CONFINED IN A CAGE. — KINDNESS OF THE JAPANESE. — GOLOWNIN OBTAINS HIS FREEDOM. — GEOGRAPHICAL LABOURS OF THE MISSIONARIES IN CHINA. — BRITISH EMBASSIES. — VOYAGE OF THE ALCESTE AND LYRA IN THE CHINESE SEAS. — THE GREAT WALL. — THE COREAN ARCHIPELAGO. — ERRORS OF THE MAPS. — THE LOO CHOO ISLANDS. — AMIABLE CHARACTER OF THE PEOPLE. — THEIR INTELLIGENCE. — WRECK OF THE ALCESTE.

THERE is nothing that exemplifies more forcibly how little the active genius of man is deterred from the pursuit of interest by considerations of distance or of dangers; and, on the other hand, how little all the advantages of proximity conduce to enquiry, when the motives of interest are removed, than the fact that European nations were tolerably well acquainted with the intricate north-western coast of the New World, while they still had but a very obscure and imperfect knowledge of the eastern coasts of Asia. The examination of those coasts,

indeed, was chiefly to be expected from the Russians, who had not, however, as yet attained that share of nautical experience and skill which is requisite in a navigator who attempts to examine unknown shores. Yet the sovereigns of Russia were not indifferent to their interests, nor blind to the advantages that might result to their vast empire by the careful examination of its boundaries, and by obtaining a knowledge of the countries adjoining it to the south, particularly near the sea shore.

Mr. Joseph Billings, an officer who had sailed with captain Cook in his last voyage, was induced to engage in the Russian service, and was appointed by Catherine II. to descend the Kolyma, and to examine the northern coast of Siberia, from that river to East Cape. Two light vessels being built at the Kolyma, captain Billings embarked in the spring of 1787, as soon as the ice broke up. The river, however, was so swoln by the melting of the snow and ice, as to render the navigation exceedingly dangerous, the vessels being often forced by the current out of the channel of the river into the woods, which were inundated. After sailing for about three weeks to the north and east, and having fallen in with much ice, Billings thought it unadvisable to proceed. The farthest extent of his progress in this short voyage was about five leagues beyond *Cape Baranoi Kamen*. Captain Sarytcheff, who accompanied Billings, offered to proceed eastward in an open boat; but to this proposal Billings would not give his assent. On returning to Yakutsk, Billings was surprised to find there his former comrade John Ledyard, who was corporal of marines on board the Resolution in Cook's last voyage. Ledyard was animated by an enthusiastic love of adventure, and with no other funds than a sum of about fifty pounds, raised for him by subscription by sir Joseph Banks, he undertook to travel across the old world; and, crossing from Kamtschatka to America, to cross that continent likewise on foot in its broadest part. At Irkutsk, however, he was arrested as a spy by order of

the Russian court; and Billings, from whose knowledge of his character and intentions he expected some advantage, declined to interfere in his behalf, as if he were desirous of engrossing to himself the imperial favour, which he was conscious he did not deserve.

Billings was now ordered to examine the islands on the north-west coast of America, and two ships were built at Okotsk for that purpose. In June, 1790, he visited the Aleutian Islands; and he has the merit, if not of contributing largely to our stock of geographical information, at least of vindicating the rights of humanity, by revealing the tyranny and oppression exercised by the Russian traders over the unhappy islanders. Notwithstanding the exertions made by the Russian government, in consequence of his representations, to shield the American islanders from the tyranny of the Russian merchants, the intolerable burden of slavery, and the hardships of the hunter's life, in which their employers keep them constantly engaged, have had the effect of nearly extirpating the aboriginal race of islanders.

From the Bay of St. Lawrence, on the south side of Behring's Strait, Billings proceeded over land on the 13th of August, 1790, to examine the country of the Tshuktski. He was desired by his instructions to examine the north-eastern coast of Siberia, as far as the Kolyma. It does not appear that in this journey he followed the sea coast, or that he made any attempt to trace its windings. His attempts to explore a country but little known were feeble and fruitless: he made short journeys, and halted often; and added nothing to geography by his various expeditions, except, perhaps, by ascertaining with tolerable correctness the longitude of the Kolyma. Of the bold and independent people who inhabit the north-eastern portion of Siberia the following account is given in Sauer's history of the expedition: — "We passed three villages, and halted at a fourth for the night. The huts were dug under ground, covered with earth, of a square form, with a fireplace in the middle, and four large stones made the

hearth. We were obliged to treat with them for water, and for fuel to boil our food, and to pay for it immediately. Observing our good nature and want of power, they took a liking to the buttons on our coats, and cut them off without ceremony. The men were tall and stout, and the warrior had his arms and legs punctured: the women were well made, and above the middle size; healthy in their appearance; and by no means disagreeable in their persons: their dress was a doe's skin, with the hair on, and one garment covered their limbs and their whole body. They wore their hair parted and in two plaits, one hanging over each shoulder, their arms and face being neatly punctured." The Tshuktski were not pleased to see the Russians measuring their country; and, in consequence, took from them their measuring lines; neither would they permit them to write any notes or observations.

The Russians have, since 1818, made many attempts to push their discoveries into the Northern Ocean. Baron Wrangel, an enterprising officer, made a journey of fifty-eight days on the ice, but could not discover any of those islands which former adventurers had reported to exist. He determined the latitude of North Cape, and has contributed to discountenance the opinion that the shores of America any where approach those of Siberia.

But it is in the Japanese seas and among the Kurile Islands that the Russians have been most successful in their hydrographical labours. There are no seas in the world with which Europeans have become acquainted so slowly and imperfectly as those of Japan and of the archipelago to the northward along the coast of Tatary. This is to be attributed to the dangerous nature of those seas, and to the jealousy of the Japanese, who allow no foreign vessels to take refuge in their ports. The accurate knowledge of the coast of Tatary began with the voyage of La Perouse, whose survey extended from Corea, with little interruption, to the southernmost of the Kurile Islands. About nine years later, captain

Broughton surveyed nearly the same shores; making, however, valuable additions to the labours of the French navigator. Captain Broughton sailed up the Bay of Aniwa, the deep gulf or channel which separates Sagaleen from Tatary; and, when he had reached lat. 52°, he saw a low strip of land which seemed to terminate the channel to the northward. La Perouse was induced to believe, by what he heard from the natives, that Sagaleen was an island separated from the main land of Tatary by a narrow and shallow channel; but Mr. Broughton seems to have ascertained that it is a peninsula.

As soon as Russia was taught to know, from the circumstances of the fur trade, the advantages of her seaports on the east coast of Siberia, she began to turn her eyes upon Japan. That rich and remarkable empire, which had remained quite unknown to Europe till the middle of the sixteenth century, observed so mistrustful and cautious a policy, that Europeans were still much less perfectly acquainted with it than might have been expected from its commerce, industry, and civilisation. After the expulsion of the Jesuits and Portuguese, the Dutch alone were allowed to carry on any trade with Japan; and they, willing to secure themselves in the monopoly of a paltry traffic by numberless humiliations and acts of baseness, calumniated other European nations, so as to widen the breach between the Japanese and the civilised nations of the West. It is remarkable that no people so addicted to commerce, so enterprising in their system of trade, and so well instructed, have furnished fewer materials to the geographer than the Dutch. Whatever information they obtained respecting Japan they seemed to have concealed from the rest of the world; and for some knowledge of that singular empire the learned are chiefly indebted to the industry and intelligence of Kæmpfer a German, and Thunberg a Swede, who were at different times allowed to accompany the Dutch embassy to Japan.

But though Europeans were strictly forbidden to enter the ports of the Japanese empire, it was not clear that

the Russians were included in this prohibition; and an opportunity occurred about 1780, which the empress Catherine thought might be improved into the means of opening a friendly correspondence with that country. A Japanese merchant ship was wrecked on one of the Aleutian Islands; the crew with their commander were saved and taken by the Russians to Irkutsk, where they lived about ten years. At the end of that time, general Pihl, the governor of Siberia, was ordered to send back the Japanese to their own country, accompanied by an envoy of inferior rank, who was to convey to the emperor of Japan the compliments and presents of general Pihl, and not of the Russian empress. These precautions were taken, lest the pride of the Japanese, if flattered in the first instance, might raise insuperable difficulties. In the course of their negotiations, lieutenant Laxman was selected as the envoy; and, in 1793, he arrived at Matsmai, one of the most northern of the islands of Japan. The Japanese treated the Russians with the greatest civility and attention; showed them every mark of honour conformable to the customs of the country; maintained both men and officers during the whole time they remained on land, and heaped them with presents at their departure. But the overtures of commercial intercourse were not listened to by the Japanese government. The harbour of Nangasaky alone it was stated was open to foreign shipping; and if any negotiations were to be carried on, the Russians ought to proceed to that harbour: Laxman returned with this answer in 1793. Although the permission which the Russians received to send a vessel annually to Nangasaky was a mark of favour exceeding what they had a right to expect, yet ten years were allowed to elapse before any further notice was taken of it.

At length, in 1803, it was resolved to send an embassy to Japan, in the hope of establishing a better understanding between the two empires. M. Resanoff was chosen as the ambassador; and two ships were equipped to convey him to Japan; and, when that part of their

mission was fulfilled, to proceed on a voyage of discovery. Captains Krusenstern and Lisianskoy, able young officers, both trained up in the British service, were appointed to command the ships. Krusenstern, who had visited the East Indies, was often heard at St. Petersburgh to declare that no trade could be carried on between Russia and Japan unless by ships making the circuitous passage by the Cape of Good Hope, and with seamen used to the navigation of the eastern archipelago, and practically acquainted with the Japanese seas. His views appeared to the emperor as just as they were bold, and he was selected to command an expedition which forms an epoch in the history of the Russian marine. On the 5th of October, 1803, the Russian ships left Falmouth, having supplied themselves in the English port with instruments, charts, books, provisions, and many articles requisite in the course of a long voyage. On the 26th of November they crossed the equator, and here, under a salute of eleven guns, they drank the health of the emperor Alexander, "in whose glorious reign the Russian flag first waved in the southern hemisphere."

The Russians having arrived at Nangasaky, expected to be treated with distinction; to be excused from the humiliating forms imposed on the Dutch; and hoped that, in travelling with the ambassador to the imperial residence at Jeddo, they might be able to procure some more authentic information respecting this extraordinary people than had hitherto been afforded. In all their expectations, however, they were cruelly disappointed. The negotiations proceeded slowly, and the ambassador, the officers, and crews, were kept close prisoners for two months on board the ship. On the plea of sickness the ambassador obtained leave to walk on shore; but here their imprisonment was nearly as close and irksome; the space allowed for them to walk on the beach was 100 paces long by forty wide, shut in on the land side by high fenced bamboos, and guarded by a watch-house at each end. Every boat passing to and from the ship to

this walk was guarded by ten or fifteen Japanese vessels: nor were the Russians allowed to hold the least communication with the Dutch. After some months spent in tedious suspense, the Russians learned that they had no chance of being honoured with an audience at Jeddo; but that a great nobleman was expected at Nangasaky, who might save them the trouble of so long a journey. When this plenipotentiary arrived, four days were consumed in arranging the ceremonies of the audience, and the Russian ambassador was admitted on agreeing to pay to the representative of the Japanese emperor the same compliment which Europeans are accustomed to pay to their own sovereigns; on condition, however, that he left behind him his sword and his shoes, and that he should squat on the floor with his feet folded under him, as it was quite impossible to allow him to expose them to the eyes of so great a man. The first interview was confined to the exchange of a few compliments, and enquiries of no importance. At the second, which was conducted with the same ceremonies, the plenipotentiary delivered to the Russian ambassador a paper containing the commands of his imperial majesty to the following effect: — "That no Russian ship should thenceforward be permitted to enter any port of Japan; that the presents intended for his imperial majesty could not be accepted, nor the letter of the emperor of Russia received." "Such," says captain Krusenstern, "was the result of an embassy which had given rise to vast expectation. We not only gained by it no new advantages, but lost even those which we before possessed, namely, a written permission, which Laxman had obtained for us to visit Nangasaky with one ship yearly."

On leaving the islands of Japan, Krusenstern proceeded along the eastern coast of Sagaleen to Kamtschatka, where M. Resanoff the ambassador landed, to proceed to Europe. Krusenstern then returning to complete his survey, doubled the northern extremity of Sagaleen, discovered the north-west coast of it to be a

continued series of sandy downs, and descried the opposite coast of Tatary; but, owing to the strong current, issuing as he supposes from the river Amur or Sagaleen Oula, he was unable to proceed southward, and reluctantly returned. In the course of this voyage, however, Krusenstern found the means of enlarging and materially amending the geography of the Tatarian Gulf, the Kurile archipelago, and the coasts of Japan and Yesso. His labours, added to those of Broughton and La Perouse, form a correct and tolerably complete outline of the eastern shores of the Old World.

In April, 1811, captain Golownin, of the Russian navy, was ordered by his government to survey the coast of Tatary northward to Okotsk, and the Kurile Islands, the southernmost of which are in the possession of the Japanese. Having ventured on shore on one of these islands, he was taken prisoner with two of his officers, and four seamen, and sent to Matsmai. The immediate cause of this severe proceeding was not the jealous policy of the Japanese government, but the unprovoked outrages committed by a Russian captain, who a few years before had attacked the Japanese villages on those islands. Golownin observes, that during his journey southwards, along the coast to Chakodade, a distance exceeding 500 miles, he beheld populous villages on every bay and creek. During the summer the people reside in leaf huts, built between these villages; the whole population is employed in catching, salting, and drying fish; they likewise gather a kind of sea weed, which grows in great abundance on the coast, and which the Russians call sea cabbage. This weed is spread upon the sands to dry, then collected into heaps resembling hay-cocks, and covered with matting, until the time arrives for loading the vessels which carry it to Niphon. The Kurile villages consist of small huts, without gardens or plantations, and have an appearance of extreme poverty; but the Japanese villages present a very different aspect. They are large; have regular streets; and the houses are very neatly constructed of wood. Every house has a garden,

and many are furnished with orchards. The cleanliness which prevails in the streets and houses filled the Russians with astonishment. The inhabitants are extremely vivacious, and contentment seems painted on every visage.

The southern Kuriles appear to be a different race from those who inhabit the islands claimed by Russia. They are tall and strongly made, very active, and far more handsome than their northern neighbours, from whom they also differ totally in language. The Kurile islanders, like the Patagonians, have given rise to much contradiction and variety of opinion among travellers. The gigantic stature of the latter, and the hairiness of the former, have been asserted and denied in equally positive terms. Captain Saris was informed in Jeddo, by a Japanese traveller, that the people of Yesso had their bodies covered with hair, like monkeys. Spanberg confirmed this story; and Broughton observes of these islanders, that "their bodies are almost universally covered with long black hair, and that even in children the same appearance is observable;" but notwithstanding this weight of testimony, and the difficulty of proving a negative, Krusenstern ventures to assert that the hairiness of the Kuriles is an idle story; because, as far as his examination went, he found these islanders as smooth as Europeans. Yet Golownin, who had abundant opportunities of observing these people, frequently speaks of the hairy Kuriles as a separate people.

On approaching Chakodade, multitudes came out to meet the Russian captives, who were conducted to prison with a kind of processional pomp. "Both sides of the road," observes Golownin, "were crowded with spectators, yet every one behaved with the utmost decorum. I particularly marked their countenances, and never once observed a malicious look, or any signs of hatred towards us; and none showed the least disposition to insult us by mockery and derision."

The prisoners having little hopes of liberation, and prompted by the glimpse of the sea which they caught

from the windows of their prison at Matsmai, resolved to attempt an escape. Being conducted by their guards to exercise on the skirts of the city, they were enabled to take a view of the country, and to observe the paths which they might choose in their flight. In the night of the 23d of April, they broke an opening in the fence of their prison, through which they crept, and made their way through the trees to the nearest hill. The island of Matsmai is extremely mountainous and almost uninhabited in the interior. The Russians, who avoided the roads and wandered in the most unfrequented places, were extremely distressed from fatigue, owing to the ruggedness of the country, from exposure to the cold during the night, and from want of good food. Winter still reigned among the mountains, but they preferred the regions of forests and of snow to the chance of falling again into the hands of the Japanese. Their intention was to descend to the sea-shore during the night; and, seizing on some large boat, to put to sea, and trust themselves to fortune. But they were not unobserved. For two or three nights they visited the beach, but their strength was so much reduced that they were unable to launch the boats that were drawn up on the shore. They caused an alarm that proved fatal to their hopes; and, being surrounded in a thicket where they took shelter, were compelled to surrender to the Japanese soldiers. "When we passed through the villages," says Golownin, "the inhabitants flocked from all sides to look at us; but to the honour of the Japanese it ought to be observed, that not one of them treated us with any thing like insult. They all seemed to commiserate us, and some of the women even shed tears while they presented us with something to eat or drink. Such was the expression of feeling among a people whom enlightened Europe has regarded as barbarians."

To prevent any further attempts at escape, the Russians were now more rigorously confined. They were imprisoned in small cages, placed together in the same room, and nearly excluded from light. That in which

Golownin was obliged to enter was six paces long, five broad, and about ten feet high. They were inspected by the guards every half hour, and awakened from their sleep to answer the call. This rigour, however, was of short continuance; the disposition of the Japanese seems to be as humane as their principles are severe. The governor of Matsmai represented the strangers favourably to the emperor; and this, united with the negotiations of captain Rikord, who had captured a wealthy Japanese by way of reprisal, had the effect of procuring their liberation, after a confinement of about two years. The kind-hearted Japanese evinced the sincerest joy at their release; and in conformity with the general wish of the inhabitants, the *bunyo* or governor of Matsmai ordered that prayers for the safe voyage of the Russians should be offered up in all the temples for the space of five days. During their residence among the Japanese, they had abundant opportunity of observing the honesty, industry, and general civilisation of that singular people. The Japanese are very fond of reading, and constantly carry books with them. The Russians were at first unable to sleep in prison from the constant reading aloud of their guards. A native academician availed himself of the knowledge of the Russians to improve himself in mathematics and natural philosophy; others took a pleasure in forming vocabularies of the Russian language.

The government of China, like that of Japan, is so studious to avoid a close intercourse with European nations, that our knowledge of that country, at present, very little exceeds that which we possessed two centuries ago. The English and Russian embassies to Pekin have been productive, indeed, of much important information. The history of lord Macartney's embassy, and that of lord Amherst, with the travels of Barrow and others, afford abundant instruction as well as amusement. But yet from these attempts to establish a correspondence with that remote and extensive empire, little has been added to our geographical know-

ledge. Of the sea coasts of China we should know but little, if it were not for the labours of the Jesuit missionaries, who, notwithstanding the difficulties they had to encounter from the prejudices of the people, succeeded in constructing an excellent map of that country.

Important amendments, nevertheless, in the hydrography of this part of the world, were made by the exertions of the commanders who carried out lord Amherst on his embassy to China. The ambassador being landed, the ships proceeded to explore the gulf of Lea-tong, hitherto unexamined by any European ship. As they approached the shore of Tatary, in lat. 39° 29′, they caught a glimpse of the great wall of China. It was seen winding over a long range of hills, and was lost to view on the summit of a very lofty mountain in the distance. The people on the coast here seemed wholly unacquainted with Europeans. An officer who went on shore, and seated himself beneath a tree, was quickly surrounded with people, who examined him and his dress with the minutest scrutiny. They were particularly pleased with the anchor buttons, and often accepted them in bartering, when they refused a dollar. The women, impelled by curiosity, made their appearance in great numbers; and they all had small feet. These people were Chinese in every respect, but apparently more simple, and at the same time more polite, than those of the southern provinces. The houses and gardens were remarkably neat; and the English officers remarked that there was an air of comfort about their villages, not always to be found in the more civilised parts of Europe. Captain Maxwell, in surveying this gulf, took the liberty of giving English names to islands, bays, and capes, which the natives no doubt have named already. We find *Leopold's Isle, Cape Charlotte, Leadenhall Passage,* and similar designations on the populous coast of China. This liberty of giving names to places named before cannot fail, in the course of time, to create the utmost confusion in geography. Captain Hall, in the Lyra, had

in the mean time surveyed the western and southern shores of the Gulf of Pe-che-le; and the two ships having joined company at the head of the Yellow Sea, proceeded eastward along the shore. They met with some islands, which were named *Sir James Hall's Group;* and as they passed to the south, they found that the sea was studded with islands as far as the eye could reach. They were visited by an old chief from the shore, remarkably inquisitive and courteous; but when they ventured to land, he evinced the strongest signs of grief, and by drawing his hand across his throat, and shutting his eyes, he seemed to intimate that he should lose his head in consequence. Finding a piece of paper in the ship's cabin, he wrote some characters upon it, which being afterwards interpreted at Canton, proved to be, "I dont know who you are: what business have you here?"

Basil's Bay, as this place was named, lies in lat. 36° 9′, long. 126° 32′; being at least 120 miles up the country according to the existing charts; so that the missionaries, in laying down this part of the coast, seem to have depended wholly upon report. The ships, proceeding to the southward, found the sea covered with innumerable islands, all lofty, though not of great extent. They appeared also to be cultivated, and the inhabitants crowded to the highest eminences to gaze on the ships as they passed by. From the top of one of the highest, 135 other islands were counted around; the main land, which seemed lofty, was distant about forty miles to the east. The intervening spaces between the multitude of isles, generally from one to three, and sometimes four miles across, appeared to be all close harbours, and capable of containing in security all the navies of the world: they form, in fact, an almost endless chain of harbours, communicating with each other. As these islands are all inhabited, it is probable that they possess fresh water. By this voyage it was ascertained that the western coast of the peninsula of Corea had been hitherto laid down on the charts from

130 to 150 miles too far to the west. The dense archipelago also, which fronts this coast, was quite unknown; the succession of islands, perhaps, being mistaken for continuous land, and supposed to belong to the main.

Having completed this important survey, the ships proceeded to the Loo Choo or Lekeyo Islands, with which Europeans were previously but little acquainted. Captain Broughton, indeed, after the loss of his ship, the Providence, in 1797, experienced the humanity of these islanders, who at the same time testified much uneasiness while he remained on their coasts. In order to find a pretence for visiting the harbour of the great Loo Choo Island, the hold of the Alceste was filled with water, and the pumps set to work, as if the ship had sprung a leak. The islanders sympathised with the distress of our people, and sent a number of carpenters on board in order to assist in stopping the leak. The ships were afterwards visited by the chiefs; friendships were contracted with the natives; and during five weeks that the English remained here, every day's experience raised the simple inhabitants of Loo Choo still higher in their estimation. The island itself is described as one of the most beautiful and agreeable spots on the surface of the globe. Such is the felicity of its soil and climate, that productions of the vegetable kingdom, very distinct in their nature, and generally found in regions far distant from each other, grow here side by side. Here the banyan of India and the Norwegian fir, the orange and the lime, the tea plant and sugar cane, all flourish together. In addition to these advantages, the island is watered by numerous fine rivers, and boasts several secure harbours.

The natives of Loo Choo are a very small race of people; the average height of the men not exceeding five feet two inches at the utmost. The whole animal creation seems here to be of a diminutive size; the bullocks, goats, and pigs being all reduced in the same proportion. The islanders are as fair as the natives of the south of

Europe, and resemble the Chinese in every thing but in not possessing the elongated eye which distinguishes the latter. They seem to be remarkably intelligent; and one of them made, in a short time, considerable proficiency in the English language: their politeness also is very striking, and free from the oppressive load of ceremonies which disgraces the good breeding of the East.

On the voyage of the Alceste to Batavia she was wrecked on a coral reef in the Straits of Banda. Two of the boats, in which were the ambassador and about forty-six individuals, proceeded to Batavia to procure assistance for their shipwrecked companions. The narrative of the conduct of these, while continually threatened by bands of Malay pirates, and ignorant when their misfortunes would terminate, offers a conspicuous example of the advantages of discipline, and redounds much to the credit of the British navy.

CHAP. XXI.

TRAVELS IN THE HIMALYEH.

JOURNEY OF WEBB AND RAPER IN THE HIMALYEH. — GREAT HEIGHT OF THESE MOUNTAINS. — MEASUREMENTS OF COLEBROOKE — DEWALAGIRI — CHUMULUREE. — JOURNEY OF MR. MOORCROFT. — PUNDIT'S MODE OF MEASURING. — PASS OF THE NITI GHAUT. — DABA. — APPEARANCE OF GORTOPE. — THE SACRED LAKE OF MANASAROWARA. — GENERAL CHARACTER OF THE MOUNTAINS. — VILLAGES. — RETURN OF MOORCROFT. — DOUBTS AS TO THE HEIGHT OF THE HIMALYEH. — SECOND JOURNEY OF MR. WEBB. — HEIGHT OF PERPETUAL SNOW. — ELEVATED PLAINS OF THE UNDES — THEIR PRODUCE. — JOURNEY OF MR. FRASER. — SUPPOSED POISONOUS WIND. — GANGOUTRI. — PECULIAR APPEARANCE OF THE HIMALYEH.

THERE are no objects in nature which mankind, in the early stages of society, are more prone to regard with gratitude and admiration than great rivers. The fame of the Ganges was widely spread abroad even in the

earliest times; and it is no wonder that the British, when they became masters of India, should view with peculiar curiosity a river which was to the natives an object of the profoundest veneration. Of its sources nothing certain could be known; in most maps they were placed far to the north in Tatary, as it was thought necessary that the fountains of so great a stream should be situated at an immense distance from its mouth. A few only were disposed to think that it had its rise on the south side of the Himalyeh or Snowy Mountains, which form the northern boundary of India.

To decide this question, lieutenant Webb, accompanied by captains Raper and Hearsay, was despatched in 1808, with directions to proceed to Gangoutri, where he was to view the narrow of the Ganges called the Cow's Mouth, a spot held sacred by the Hindoos. They arrived at Haridwar on the 1st of April, and had the pleasure of viewing the immense crowds which are assembled on the plains here every twelfth year by the double motives of commerce and religion. At this point merchants arrive from all parts of India, as well as from Cashmere, and the countries beyond the Punjab and the Himalyeh: the numbers assembled at the fair was supposed by the British officers not to fall short of 2,000,000. On entering the mountains, the dangers which they had to encounter in climbing precipices and journeying along steep mountains, on paths sometimes not a foot broad, were compensated by the magnificence of the alpine scenery that surrounded them. The table-lands over which they occasionally travelled were clothed with European vegetation. The mountains above them were covered with forests of fir, while in the chasms below them, at the depth of 4000 feet, the productions of India still flourished luxuriantly in the neighbourhood of the mountains. From this height they saw several chains of mountains, seven or eight in number, one behind the other; the view terminating in the snowy pinnacles of the mighty Himalyeh. After crossing torrents by bridges of ropes, and encountering all the

dangers of a mountain journey, our travellers were stopped at a village called Barahat by the assurance that the road to Gangoutri was beset with the most formidable perils; they were contented, therefore, with sending forward a moonshee with a few pious Indians to examine the Cow's Mouth, and to explore the river if possible, to its termination. In three weeks they returned with a formidable account of their adventures. The Cow's Mouth, it appears, is a mere fragment of rock in the river, which chance or its sequestered situation has rendered an object of worship. They had traced the river a few miles above Gangoutri, where it was about fifteen or twenty yards broad, and about waist-deep; farther up the valley, where no one had ever been able to penetrate, it was entirely covered by beds of snow. They proceeded so far up in their exploration that every object before them was covered with snow. The party returned by Serinagur, which had been visited twelve years before by captain Hardwicke, the first British traveller who had crossed these mountains from India. Among the alpine bridges which they met with in their journey, one appeared peculiarly critical: it was composed of a few ropes stretched across the ravine with a hoop resting on them; in this the traveller rested his back, and then, suspended from the ropes, by his hands and legs he worked his way across. The travellers proceeded from Josimath to examine the source of the Alacananda, a chief tributary of the Ganges; and they succeeded in tracing that river to the point where it emerged from the snows which had covered it for ages. All the mountains around were covered with perpetual snow; the scene resembled the depth of a northern winter. A few stunted pines appeared near the banks of the river; but not a trace of verdure could be discovered on the northern sides of the mountains as far as they were visible. The inhabitants of this mountainous country had handsome countenances, with florid complexions, and in general resembled the Tatars rather than

the Hindoos. Many of them amassed considerable wealth by the transit trade, in which they are engaged, carrying gold, bezoar, musk, salt, and borax from Thibet to India. Our travellers found in the remote and almost inaccessible valleys of the Snowy Mountains numerous shrines and temples, venerated in proportion as it was difficult to reach them, and resorted to by pious Hindoos, numbers of whom perish annually in the snow in these dangerous pilgrimages.

The great chain of the Himalyeh was crossed near its highest part by Mr. Moorcroft, who undertook his arduous journey with the double view of procuring specimens of the wool from which the celebrated Cashmere shawls are made, and of surveying the sacred lake of Manasarowara, which is an object of the deepest veneration thoughout all Hindostan. At the village of Josimath, which is far within the mountains, Mr. Moorcroft hired a pundit as the companion of his journey, with the singular stipulation, that in walking he should make every stride precisely four feet in length; by this means it was intended to ascertain correctly the space travelled over. Our travellers' path lay along the banks of the Dauli, a torrent falling into the Alacananda. The glens were clothed with forests of pine; and above, the mountains reared their summits covered with perpetual snow. From the narrowness of the paths, the abruptness of the slopes, and the quantities of snow and stones which were occasionally precipitated down, our travellers were kept in continual alarm. In these rugged passes goats and sheep are the only animals which can be used as beasts of burden.

After a fatiguing journey of seven days from Josimath, Mr. Moorcroft and his companions arrived at Malari, a small village in the midst of the mountains. The houses were built of stone, and ornamented round the upper stories with flowers and mythological pictures, after the Hindoo fashion. This village forms the summer habitation of a little horde, who carry on a trade between Thibet and India, conveying their merchandise on the

backs of sheep and goats. In winter they remove to the plains on the northern side of the mountains.

At length our travellers arrived at Niti, on the frontier of India; and it was not without pressing entreaties and tedious negotiations that they were allowed to proceed. At this place they experienced, for the first time, that difficult and quickened respiration which is always felt in ascending great heights, from the tenuity of the atmosphere. The changes of temperature in the course of twenty-four hours were also remarkable. In the afternoon the thermometer rose to 80°, and the heat was nearly insupportable; while during the night the cold was intense. As the party advanced beyond Niti, and began to ascend the Ghaut, or mountain pass, they had sensible proof of their having reached an elevation far above the level of the sea. The difficulty of respiration continually increased till they were obliged to stop at every three or four steps to take breath and recover their strength. Blood burst from the lips of Mr. Moorcroft; he was affected with a giddiness in the head, which seemed to threaten apoplexy. On the summit of the mountain pass which separates Hindostan from the northern world of Asia, the boundary is marked merely by a heap of stones, in which is fixed a pole bearing numerous pieces of cloth, the devout offerings of pilgrims who have passed that way. They now began to descend by gradual slopes through a country naked and sterile in the extreme, and wanting the bold magnificence that characterises the southern sides of the mountain.

A journey of ten days from Niti brought our travellers to Daba, a town situated on the summit of a rock, too steep and narrow to retain the snow, and at the same time sheltered from the cold winds. Although the travellers had advanced into this country without permission, they were treated with civility by the governor of Daba. In the college of the Gelums, or Shaman monks, Mr. Moorcroft saw the greatest assemblage of Hindoo deities that he had ever beheld. The lama, or chief of the college, treated them with much kindness, and taking

hold of one of their cotton gowns at their departure, he said, "I pray you, let me live in your recollections as white as this cloth." On leaving this place the party travelled for some time through valleys bordered by mountains, on which the snow was occasionally falling. A journey of five days brought them to Gortope, which had the appearance of a Tatar encampment, the village being composed of a few black tents, made with blankets fastened with hair ropes. The plains round the village were covered with prodigious multitudes of goats, sheep, and yaks or Tatarian oxen. It appeared to Mr. Moorcroft that their number could not be less than 40,000. As Mr. Moorcroft came in the character of a merchant, and appeared willing to give a good price for the fine wool, he was treated here with respect and attention. He received permission also to visit the lake of Manasarowara, but with the disagreeable condition, that he should return as he came, through the Niti pass. From the Tatar merchants of Ladak he received some information respecting the geography of this little known country, considerably at variance with European maps, yet not sufficiently precise to enable us to correct them. A river flowed through Gortope, which Mr. Moorcroft, in the first instance, hastily supposed to be the Oxus; but some further information and reflection led him to recognise in it a chief and perhaps the main branch of the Indus.

Our travellers arrived on the 5th of August at the sacred lake of Manasarowara, the most venerated of all the places of pilgrimage resorted to by the Hindoos, a race singularly prone to reverie and veneration. The lake was about fifteen miles long and eleven broad, and with its borders of towering crags, and its surrounding barrier of lofty mountains wrapt in perpetual snow, it formed a magnificent scene. Numerous convents are scattered along its borders, into one of which Mr. Moorcroft was invited to enter, as he supposed, from motives of charity. His health was so much affected by the length and fatigues of his journey, that he was unable to complete his

survey of the lake, so as to ascertain whether any rivers flow out of it. From personal examination, he was convinced that no rivers flowed out of it on the northern, western, and southern sides. He despatched two of his Hindoo attendants to examine an angle to which he was unable to proceed, and they reported, on their return, that no river flowed from the lake on the eastern side. But a geographer who takes into consideration the size of this lake, situated in a region where evaporation cannot be very great, and the freshness of its water, may not, perhaps, be disposed to rely on a conclusion supported only by the evidence of a Hindoo.

On the 8th of August the party left the lake, and began their return. All the villages which they saw in this country resembled each other in situation and appearance: they were all perched on the heads of abrupt precipices, with higher cliffs, which served as shelter, rising above them. The houses were generally painted with flowers or grotesque figures, and looked singularly picturesque in the midst of these wild and stupendous mountains. The season in which the pass of the Himalyeh was practicable now hastened to a close, and Mr. Moorcroft, whose health was much impaired by the fatigues of the journey, lost no time in returning from Daba, by the same road which he had followed in his journey to that place.

Until the journeys of Mr. Webb and of Mr. Moorcroft, the attention of the enquiring world had never been drawn to the stupendous height of the Himalyeh mountains. The great elevation which these travellers were sensible they had reached above the plains of India, and the immense ranges of snowy mountains which they still saw before them, rising one above another, struck them with deep astonishment, and led them to suppose that the snowy pinnacles of the Himalyeh might at least rival in height the colossal summits of the Andes. Measurements had been made by colonel Crawford, in 1802, which, though not published at that time, were known to the scientific world, and made them, for the

first time, acquainted with this great mountain range. Observations made by colonel Colebrook, from the plains of Rohilcund, 144 miles distant from the mountains, gave them an elevation of nearly 22,000 feet; but timidity, rather than exaggeration, appears to have mingled with and modified these calculations. Lieutenant Webb, in his journey towards the source of the Ganges, made several observations on the remarkable peak called Jamunavatari, near the source of the Jumna, which stands conspicuous in the foremost range of the Himalyeh. The result of his observations gave Jamunavatari a height of 20,000 feet above the table-land on which he stood, and which he estimated to be at least 5000 feet above the plains. As all these calculations, however, seemed too vague and imperfect to satisfy the critical, he was determined to measure, with the utmost accuracy of mathematical science, the height of some conspicuous peak, and so *Dewalagiri*, or the White Mountain, was selected for this purpose. Elaborate measurements, made from the plain of Gorakhpur, gave this mountain an absolute elevation of 27,550 feet.

The testimony of all the travellers who visited the Himalyeh corroborated the inferences derived from these scientific observations. The immense ranges which they saw rising successively one above the other impressed them more strongly with the belief of the great height of these mountains than could have been produced, perhaps, by the sublime spectacle of an isolated peak rising at once from the sea and towering above the clouds. Colonel Kirkpatrick, in describing the mountain scenery of Nepaul, itself an elevated land, observes, that the first range of mountains, though absolutely lofty, yet appear but hills compared with the great mountains that rise behind them. One of these, Sheoopoorah, was supposed to rise 4000 feet above the valley; farther back, however, Mount Jibjibia, clothed nearly to its summit with pendulous forests, still rose 6000 feet higher; but these great mountains sunk into hills of no importance when compared with the mighty barrier of snowy

mountains which terminated the prospect. These were supposed to be at least 20,000 feet above the valley, which is itself 4000 feet above the sea. This conjectural estimation was confirmed by mathematical observation made by colonel Crawford of eight conspicuous peaks, which were found to range from 15,000 to 24,000 feet above the level of the sea. But these lofty mountains all yield the preeminence to the mighty peak of Chumulari, which stands on the frontiers of Bootan and Thibet. This great sovereign of the Indian mountains is supposed, from the great distance at which it is visible in the plains of India, to be not less than 30,000 feet in height.

Notwithstanding all these observations having the aid of mathematical precision, doubts were still entertained respecting the elevation of the Himalyeh mountains. The learned were slow to acknowledge the accuracy of calculations which were liable to be influenced by the natural proneness of the human mind to yield itself up implicitly to whatever is sublime and wonderful. It was objected, that the line of perpetual snow, according to the accounts of travellers in the Himalyeh, was at too great a height above the valleys to render it likely that the latter had so great an elevation as was assigned to them; it was supposed that the limit of perpetual snow in those climates ought to be at the height of about 13,000 feet above the sea; and this principle but ill accorded with the height assigned to mountains in the Himalyeh richly covered with forests of gigantic pines. But it was certainly inverting the proper order of philosophical reasoning to judge peremptorily of observations by supposed laws of nature, instead of endeavouring to discover those laws from observations. Half a century ago, measurements of height made with barometers were considered much too erroneous to be relied on, and a preference was given to the measurement of angles; but in this case the latter mode of observation was not thought satisfactory, and recourse was had to the barometer. In a second journey,

Mr. Webb proceeded to the Niti Ghaut, the height of which he ascertained, by barometrical measurement, to be 16,814 feet. This is perhaps the highest mountain pass in the world; yet there was no snow here, nor on the cliffs 300 feet above it; and Mr. Webb confirmed the accounts of Mr. Moorcroft respecting the noble forests of pines, mingled with cypresses and cedars, which clothed those lofty ridges on which the human being finds it difficult to respire. The high limits of perpetual snow on the Himalyeh mountains is justly ascribed by Mr. Webb to the great elevation of the table-land or terrace from which those mountain peaks spring up. As the heat of our atmosphere is derived chiefly from the radiation of the earth's surface, it follows that the temperature of any elevated point must be modified in a very important degree by the proximity and extent of the surrounding plains. These observations seem to refute satisfactorily the objections started respecting the great height of the Himalyeh mountains, which may be therefore safely pronounced to be the loftiest mountain chain on the surface of the globe.

But the anomalies which these great mountains seem to present, when viewed from the south, are insignificant in comparison with the contradiction given by the great plains beyond them, to the confidence of theory. The high table-land known in Europe by the name of Little Thibet, and called by the Hindoos the Undes, or region of wool, is supposed to have a general elevation of nearly 15,000 feet; and yet, so far from being clothed with perpetual snow, as theory would have it, it affords the finest pasture for innumerable herds and flocks throughout the year. In some favoured spots of this elevated land there is a species of grain cultivated from which the natives make their bread: it is bearded, like barley; but is said to be a species of wheat. The summer of this table-land is very short, hardly extending to two months; but vegetation starts up vigorously as soon as the snow disappears, and the fruits are quickly ripened by the rays of a glowing sun. Thus, it is not

surprising that the limit of perpetual snow should be much higher in the Himalyeh than in the Andes; since the lofty peaks of the former range rise from a table-land at least 5000 feet higher than that of Los Pastos, which lies amongst the highest Andes.

Another journey through the snowy range of the Himalyeh, was made by Mr. Fraser, whose route lay between the ravines of the Sutledge and Alacananda: he was not provided with instruments, nor does he seem to have contemplated adding by his journey to the stock of scientific information; but he gives an interesting and amusing account of the industrious habits of the mountaineers, of their singular customs, and particularly of the prevalence of polyandry throughout the whole of the hilly country, where "it is usual for a family of four or five brothers to marry and possess the same woman at the same time, who thus becomes the wife in common to all." Having reached the source of the Jumna, at the foot of Jamunavatari, the height of which was estimated by Mr. Colebrook at 25,500 feet, Mr. Fraser was in the very heart of the lofty Himalyeh, yet, even in this elevated situation, village succeeded village in the most romantic and terrific positions, and surrounded on every side by snow: Mr. Fraser talks even of growing crops of wheat, of a lovely wooded and flowery path, and of the finest walnut trees he ever saw. From this place he proceeded to cross directly over the mountains to Gangoutri. His guides described the journey as most dangerous, and endeavoured to dissuade him from it: they affirmed that a pestilential wind blew from the mountains, which renders the traveller senseless, and deprives him of motion. The second day brought him to the highest limits of vegetation: the heaths and junipers had disappeared, but still flowers of the most brilliant hues continued to raise their heads among the patches of snow. Here the Hindoos began to complain of the poisoned wind. "I had no idea," says Mr. Fraser, "that height could have so severely affected

the strength and chest, and yet it must have been this alone; for, severe as was the ascent, and bad as the road was, we had met with fully as bad some days before; and though the people asserted that the air was poisoned by the scent of flowers, and though there really was a profusion of them through the whole of the first part of the march, yet the principal part of them had no smell, nor could I perceive any thing in the air, except a cold and somewhat raw wind; besides which, the chief distress was experienced after we reached the lofty gorge of Bomsooroo, which was beyond the region of vegetation, and consequently could not be easily affected by the perfume of flowers. After reaching that place, no one was proof against this influence." At the time when our travellers experienced those distressing sensations of sickness, giddiness, and lassitude, they were several thousand feet below the nearest of the snowy summits. These fatigues, however, were amply repaid by the grandeur of the mountain scenery round Gangoutri; a spot where the sentiments excited by the magnificence of nature derive additional force from the religious feeling with which the Hindoos regard this fountain of their sacred river. Though Mr. Fraser was unprepared or unqualified to measure the heights of the Snowy Mountains, he vividly describes their wild and singular appearance; their deep glens, and obelisks of bare rock, shooting up from the slopes of everlasting snow. "There is that in the appearance of the Himalyeh range, which every person who has seen them will allow to be peculiarly their own: no other mountains that I have ever seen bear any resemblance to their character: their summits shoot in the most fantastic and spiring peaks to a height that astonishes, and, when viewed from an elevated situation, almost induce the belief of an ocular deception."

CHAP. XXII.

BRUCE'S TRAVELS.

BRUCE APPOINTED CONSUL AT ALGIERS. — HIS TRAVELS ON THE BARBARY COAST. — LION'S FLESH USED AS FOOD. — PETRIFIED CITY OF RAS SEM. — BAALBEC AND PALMYRA. — RECEPTION OF BRUCE AT CAIRO. — HE PROCEEDS UP THE NILE. — JOURNEY ACROSS THE DESERT. — JIDDA. — THE MOUNTAIN OF EMERALDS. — COMMERCE. — JOURNEY FROM MASACH. — MOUNTAIN OF TARANTA. — RUINS OF AXUM. — STEAKS FROM A LIVING COW. — HE ARRIVES AT GONDAR. — RECEIVED AT COURT. — RAS MICHAEL. — VISITS THE CATARACTS OF ALATA. — INTERNAL DISSENSIONS. — INTERVIEW OF MR. BRUCE WITH FAZIL. — MADE GOVERNOR OF GEESH. — PROCEEDS TO THE SOURCES OF THE NILE. — LAKE ASANA. — SUPERSTITIONS OF THE PEOPLE. — DESCRIPTION OF THE FOUNTAINS. — EXULTATION OF MR. BRUCE. — HIS MERITS. — HE DISINGENUOUSLY ENDEAVOURS TO ENHANCE THE VALUE OF HIS DISCOVERIES.

FEW narratives of travels have ever excited greater interest, or are better calculated to afford amusement, than that written by the subject of this chapter. No traveller ever possessed in a higher degree the confidence and courage requisite to enforce respect among rude nations; few were better qualified by talents of observation and general knowledge; and none, perhaps, has ever experienced more fully the reluctance with which mankind allow travellers the privilege of colouring the truth to give interest to their relation.

James Bruce, a gentleman of good family and fortune in North Britain, conceived in early life the project of examining the sources of the Nile, and thus solving what from the remotest times had been considered as the most interesting geographical problem. He travelled through most countries in Europe; and in Holland, where the oriental school of Erpenius and Schultens still flourished, he acquired a knowledge of the Arabic, and Geez or Ethiopic languages. He also applied

himself to mathematics and to practical astronomy. The consulship of Algiers having become vacant in 1762, it was offered to Bruce, who accepted it with pleasure, and proceeded to his post, provided with a good collection of instruments for the purpose of observing the transit of Venus, and with the determination to make himself master of the Arabic tongue as it is spoken, being already well acquainted with the written language.

But he did not long enjoy the repose of office. In the beginning of 1765, in consequence of a violent quarrel with the dey, he found it expedient to resign the consulship. He proceeded accordingly to travel in the East, for which his residence in Algiers had completely prepared him. On the coast of Barbary he touched at every place at which he could expect to meet with the remains of antiquity. At Hydra, the Thunodunum of the ancients, on the frontiers between the kingdom of Algiers and Tunis, he found a tribe of Arabs called *Welled Side Boogannim*, or the Sons of the Father of Flocks, who maintain themselves in a state of independence. They form a sort of religious or military order; their chief being considered a saint. By their institutions they they are obliged to eat lion's flesh for their daily food. From this law it follows that they are bold and expert hunters. Their character for intrepidity, and the service they render the country in which they dwell by destroying the wild beasts, gain them the exemption from tribute which they enjoy. Bruce himself had an opportunity of feasting on lion's flesh, which he found to be lean, tough, with a musky smell and disagreeable flavour.

At *Jibbel Aurez* he was surprised to see that the mountains were inhabited by a tribe with blue eyes and fair complexions. They were a savage independent race, and were supposed by our author to be a remnant of the Vandals. Their mountain dwellings were huts constructed with mud and straw.

Our traveller, who appears to have been much under

the influence of a strong propensity towards the wonderful, travelled by Arsinoe and Barca to Ras Sem, avowedly for the purpose of disproving a story common in Africa, and related, but not believed, in Europe, respecting the existence of a petrified city in the desert. The inhabitants of Ras Sem, it was stated, to the great amazement of the credulous, were still to be seen, fixed in the several attitudes and the different employments in which they had been overtaken by divine vengeance. A French consul of Tripoli offered some Arabs who related the story a large reward if they could procure for him one of these petrified men; and after much delay and evasion they at length brought to him a mutilated statue, which they had found amongst some of the ruins on the coast. After a narrow escape from being drowned in the harbour of Bengazi, Bruce visited Rhodes, Crete, Cyprus; and from thence proceeded to Sidon, with the intention of exploring the mountains of Libanus and Antilibanus. He visited the venerable ruins of Baalbec and Palmyra; and while apparently in doubt in what direction to pursue his travels, the advice of Dr. Russell, well known for his history of Aleppo, decided him to give the preference to Abyssinia. Rumours, it appears, had circulated at home respecting his projected travels, and his intention of visiting the head of the Nile, and some insinuations so much annoyed him, that he affected to abandon that scheme; but it is obvious, from the choice that he finally made, that he had never seriously abandoned the thoughts of carrying his favourite project into execution.

At the time when Bruce visited Egypt, that country was not so accessible to strangers as it is at present. Christians were exposed to violent outrage and insult; and it required both courage and address to face and to escape the dangers with which he was threatened. It happened, luckily, at the time of our traveller's arrival at Cairo, that Ali Bey, the pasha of Egypt, was completely governed by his secretary, a Copt named Risk. This influential minister was much devoted to astrology, and

was strongly impressed in favour of our traveller at the sight of his apparatus of instruments, which were opened and examined at the custom-house. He assured Bruce that he was under the immediate protection of the bey. Our traveller was at first uneasy at this unusual semblance of friendship in one who was known to be of a treacherous and insidious disposition; but when he learned that the secretary enquired earnestly respecting his knowledge of the stars, he at once understood the affair, and his fears were dispelled.

At Cairo he lodged in the convent of St. George, where he fortunately met with an old friend, a Greek priest, from whom he had received instructions in the Greek language at Algiers. His former preceptor had now risen to the second dignity in the Greek church in Egypt: from him Mr. Bruce received much important information and assistance in regard to his plan of penetrating into Abyssinia; and he procured from him letters of introduction to the heads of the Greek church in that country.

On the 12th of December, 1768, Bruce embarked to ascend the Nile. In the course of his voyage he appears to have observed rather the proofs of lawlessness and poverty among the people than of the fertility and abundance of the soil. It appeared to him that the people in the date villages were of a more yellow and sickly complexion than any whom he saw elsewhere; their countenances also were inanimate and dejected. After the third day's voyage the scene changed for the better: the Nile was a full mile broad, with a considerable depth and strong current; the banks were covered with villages, all surrounded with palm trees, verdant and pleasant, but not free from the dull monotony which fatigues the eye of the traveller in Holland. At a village called Rhoda he saw the magnificent ruins of the ancient city of Antinous, built by Adrian: unfortunately he had not known of them when he left Cairo, and was, in consequence, unprovided with those passports and recommendations which might have enabled him to visit

them in safety. On his enquiring into the character of the people who dwelt here, he was informed that the town was inhabited by very bad Turks, very bad Moors, and very bad Christians; that several devils had lately been seen among them, who had been discovered by being better and quieter than the rest. A little before our traveller reached Dendera, he saw the first crocodile, and afterwards hundreds of them lying upon every island like herds of cattle; yet the inhabitants of Dendera drive their beasts of every kind into the water, and they stand there for hours. The women, too, coming to fetch water in jars, often venture into the river, but our traveller could not learn that they were ever attacked by the crocodiles.

At Furshout, higher up the river, Bruce visited a convent of Italian friars. This town, which contains above 10,000 inhabitants, stands in a large cultivated plain, covered with wheat and plantations of sugar canes. While our traveller remained here, it rained incessantly the whole night, at which the people were much alarmed, and declared their apprehensions that the town was about to be destroyed. In this part of Egypt rain is extremely rare. The prophets, when called on to explain the phenomenon, said that it portended the dissolution of government; which, in fact, soon afterwards took place, accelerated perhaps not a little by the prophecy.

On the 16th of February, 1796, Mr. Bruce left the Nile, and proceeded to cross the desert with the caravan for Kenné, the Cœne Emporium of antiquity. At a well called Birambar, or the well of spices, he had an opportunity of observing the singular edifices inhabited by the Azaizy, a poor tribe of Arabs: these huts are made of potters' clay, in one piece, in the shape of a bee-hive; the largest is not above ten feet in height and six in diameter. The road lay through an open plain, bounded by hillocks of sand and fine gravel; not a trace could be found of any living creature, not even the antelope or ostrich, the usual inhabitants of dreary deserts. At one of the halting places the caravan received an accession

of twenty Turks from Caramania, distinguished from the Arabs by their superiority of appearance, and the gravity and neatness which characterise their nation: they had been pillaged on their journey by the Arabs, and otherwise ill treated. On learning that an Englishman was in the caravan, they immediately sought his friendship as their countryman; for, according to Mr. Bruce, the Turks believe that a district called Caz-Dagli, on the frontiers of Caramania, was the country from which the English first drew their origin; and on this account they are always ready to claim kindred with the English when they meet them, especially if they stand in need of their assistance.

On the road from Terfoowey to Cosseir, Bruce confusedly relates that he saw naked mountains of jasper, granite, and marble of a great variety of colours, but chiefly red and green; and he supposed that the Red Sea derived its name from some of those hills which stretch towards it, and in which the red marble predominates. At Cosseir he embarked in a small vessel of Arab construction, the planks being sewed together. The object of his voyage was to visit an island called by the Arabs the Mountain of Emeralds, a name irresistibly attractive to one so forcibly influenced by the love of the marvellous. Here Mr. Bruce found some greenish crystal, which in the East is commonly denominated emerald; but yet, as it is not the true emerald of European lapidaries, he endeavours to explain away the Arabic title for this wonderful mountain.

At Jidda, he was surprised at the activity of commerce in a place apparently so wretched, and at the singular manner in which it was carried on. Valuable cargoes are disposed of by the English, on credit, to Arab and Turkish merchants, of whom they know nothing; and the dealings are regulated by brokers, for whose good conduct there is apparently no guarantee. "These Indian brokers are neither Mahometans nor Christians, but have credit with both. They sit down on the carpet, and take an India shawl, which they

carry on their shoulders like a napkin, and spread it over their hands: they talk, in the mean time, on different subjects; of the arrival of ships from India, or of the news of the day, as if they were emp'oyed in no serious business whatever. After about twenty minutes spent in handling each other's fingers under the shawl, the bargain is concluded, without a single word having been spoken on the subject, or pen and ink used in any way whatever."

Jidda is one of the most insalubrious spots of a remarkably unhealthy coast. To the eastward of the town, immediately beyond the gate, is a desert plain, filled with the huts of the Bedouins, or wandering Arabs, built with bundles of spartum, or bent-grass. These Bedouins supply Jidda with milk and butter. The town owes its consequence to its advantages as a sea-port: the merchandise which arrives here from India is again transported to Mecca, whence it is dispersed over the whole East.

Notwithstanding the letters of recommendation which Mr. Bruce carried from the governor of Jidda to the naybe of Masuah, he found it difficult to escape from the unscrupulous rapacity of this chief; but his firmness and fortunate circumstances enabled him to leave this place, and pursue his journey into Abyssinia. His road lay at first through a narrow naked plain, from which he beheld the three successive ridges of the Abyssinian mountains: the first was composed of precipitous hills, thinly covered with shrubs; the second, higher and steeper, was still more bare and rugged; the third was a row of sharp uneven mountains, which would be counted high in any country in Europe. After this moderate description, our author incautiously adds, "Far above the top of all, towers that stupendous mass, the mountain of Taranta, probably one of the highest in the world, the point of which is buried in the clouds, and very rarely seen but in the clearest weather; at other times abandoned to perpetual mist and darkness, the seat of lightning, thunder, and of storm." In descending the mountain of Hamhamon, he saw some huts of the tribe of Hazorta, who live wholly on the milk of cattle; their

flocks and herds were seen browsing on the branches of trees and shrubs, neglecting the luxuriant grass that clothed the river side. The caper tree here attains the size of the English elm.

Immense flocks of antelopes fled across the path of our traveller as he ascended the hills that skirt the mountain of Taranta. Hyenas, in pursuit of them, prowled round the caravan, and succeeded at length in carrying off an ass. Mr. Bruce describes, in his ostentatious manner, the difficulties which he had to encounter in conveying his quadrant and other instruments up the mountains of Taranta; but the plain at the top of this mountain, which, he says, "is perhaps one of the highest in the world," was found to produce crops of good wheat of excellent grain, though the stalk was not above fourteen inches high. The inhabitants of this elevated plain differed in complexion, and were superior in character to those at the foot of the mountain. Herds of beautiful cattle fed on the hills; the cows were completely white, with large dewlaps hanging down to their knees, white horns, and long silky hair.

Dixan, the first town at the foot of Taranta on the Abyssinian side, was found to be a populous place, inhabited by Moors and Christians in equal numbers. Their only trade is that of selling children, this town being the great market for the robbers and kidnappers of all Abyssinia. At Adowa, the seat of a valuable cotton manufacture, Mr. Bruce was kindly and hospitably received by Janni, an Abyssinian merchant, to whom he was the bearer of recommendations. In the country round this town there are three harvests annually; but with all the advantages of a prolific soil and a genial climate, the Abyssinian farmer is always poor and miserable. After leaving this place, our traveller passed through the ruins of Axum, formerly the capital of Abyssinia. He then entered a country so rich and picturesque as amply to compensate for the toils of the previous part of his journey. Here also Mr. Bruce witnessed an adventure, the relation of which unfortunately provoked the ridicule of the incredulous, and

threw more suspicion on his veracity than might have been produced by fictions of a graver nature. "Soon after losing sight of the ruins of this ancient capital of Abyssinia, we overtook three travellers driving a cow before them. They had black goat-skins upon their shoulders, and lances and shields in their hands. In other respects they were but thinly clothed, and seemed to be soldiers. The cow did not seem to be fatted for killing; and it occurred to us that it had been stolen. This, however, was not our business; nor was such an occurrence at all remarkable in a country so long engaged in war. Soon after the drivers suddenly tripped up the cow, and gave the poor animal a very rude fall upon the ground, which was but the beginning of her sufferings. One of them sat across her neck, holding down her head by the horns; the other twisted the halter about her fore feet, while the third, who had a knife in his hand, in place of taking her by the throat, got astride upon her belly, before her hind legs, and gave her a very great wound in the upper part of her buttock." Mr. Bruce did not see the remainder of the operation, as he supposed that the animal was about to be killed; but when informed that this was not their intention, his curiosity was awakened, and he then saw with astonishment, two pieces, thicker and longer than ordinary beef-steaks, cut out of the upper part of the buttock of the beast. The skin, however, had not been cut away, and being now flapped over the wound, was fastened by a few small pins; a plaster of clay was placed over it, and the animal was again driven on. The intrinsic improbability of this story furnished a good theme of animadversion to those who disbelieved our author; while others supposed that he was justified in his statement by the ascertained fact that the Abyssinians often feast on raw flesh cut out from the animal the moment it is killed. But it has not occurred to the critics, that an act of wantonness might in this instance be mistaken for a common usage; and that Mr Bruce might relate the truth, without enabling us to

conclude that the Abyssinians are in the habit of cutting steaks from their living cows.

The road to Gondar, the capital of Abyssinia, lay over the mountain of Lamalmon, which, notwithstandstanding its height, is covered with luxuriant crops of wheat. The mountaineers of this district are an active industrious people, primitive in their manners, and enjoy more comfort than the other Abyssinians. Their general superiority is ascribed by the ignorant lowlanders to their skill in magic. On the plains below Lamalmon were several plantations of sugar canes, which grow from the seed. The province of Woggora, which lies next to Gondar, is one of the most fruitful in Abyssinia; yet notwithstanding their threefold harvests, the inhabitants are miserably poor. The prolific nature of the soil here is also in a great measure counterbalanced by the prodigious quantities of large ants, and swarms of rats and mice, which commit great havoc in the granaries. The ravages of war to which the country round the capital was particularly exposed, and, above all, the vices of a barbarous government, went far to counterbalance the benignity of nature.

When Mr. Bruce arrived in Gondar, both the king and Ras Michael, the governor of the province, were absent; and the other persons of consequence to whom our traveller bore letters of recommendation had followed the court. In this situation he might have suffered some embarrassment but for the kindness of his Moorish companions, who instructed him how to proceed. His friend Janni also had written from Adowa to a nobleman of wealth and influence, named Ayto Aylo, to inform him that the capital was about to be visited by a stranger of distinction, whom he recommended to his acquaintance. The very evening of Bruce's arrival in Gondar, Ayto Aylo came to visit him. Their interview commenced with a profusion of civilities on both sides. Mr. Bruce soon found that his visitor perfectly understood Tigrè and Amharic, the two native languages of Abyssinia, and had a little knowledge of Arabic; that is, he

understood it when spoken, for he could neither read nor write it, and spoke it very ill. The beginning of their discourse was in Arabic, which was rather embarrassed, but they had plenty of interpreters in all languages. The first bashfulness being removed on both sides, the conversation began in Tigrè, which, since Michael had usurped the chief power, was become the fashionable language in Gondar. Aylo was not a little surprised to hear Mr. Bruce speak it so well, and observed, that there was no fear but that he would make his way.

At the time when Bruce arrived in Abyssinia, that kingdom was agitated by violent political commotions. Michael, the governor of Tigrè, having put the king to death, usurped the chief power, while an inexperienced youth was allowed to occupy the throne; and, in order to increase his influence, he married Ozoro Esther, the daughter of the queen-mother. To this lady our traveller was soon introduced under very favourable circumstances, as a Frank and as a physician, characters usually associated by Mahometans. He was called upon to attend her children, who were attacked with the small-pox. He began with prescribing temperance, cleanliness, and ventilation; and his patients all recovered. By this opportune service he gained the favour of the ladies of the royal family, who alone appear to have enjoyed a stable influence in the midst of these revolutions. Our traveller was now introduced to the formidable Ras Michael. "He was an old man with white hair, dressed in many short curls: he appeared to be thoughtful, but not displeased; his face was lean; his eyes quick and vivid, but seemed to be a little sore from exposure to the weather. He seemed to be about six feet high, though his lameness made it difficult to guess with accuracy; his air was perfectly free from constraint. They must have been bad physiognomists that did not discern his capacity and understanding by his countenance; every look conveyed a sentiment with it; he seemed to have no occasion for other language, and indeed he spoke but little." From the young king our traveller afterwards obtained a dis-

tinguished mark of favour, in being appointed governor of the province of Ras el Feel. This was an appointment which Mr. Bruce had not sought, nor desired indeed, for himself; and he immediately transferred it to a worthy friend of his, named Yasine.

The coarse festivities of the Abyssinian court sensibly affected Mr. Bruce's health, and he felt happy beyond measure when, after much solicitation, he obtained leave to make an excursion to the sources of the Nile. This had been all along the grand object of his journey; but the Abyssinians could not be brought to comprehend the nature of his enthusiasm. The Iteghe, or queen-mother, laboured hard to dissuade him from leaving Gondar. She treated the intention of going to the source of the Nile as a fantastic folly, unworthy of any man of sense or understanding, and earnestly advised him to remain in her palace at Koscam, to await the result of the dissensions which agitated the kingdom. "See," said she, "how every day furnishes us with proofs of the perverseness and contradiction of human nature. You are come from Jerusalem, through vile Turkish governments, and hot unwholesome climates, to see a river and a bog, no part of which you can take away, were it ever so valuable; and you take it ill when I discourage you from the pursuit of this fancy, in which you are likely to perish, without your friends at home ever hearing when or where the accident happened: while I, on the other hand, the mother of kings, who have sat upon the throne of this country more than thirty years, have for my only wish, night and day, that, after giving up every thing in the world, I could be conveyed to the church of the holy sepulchre in Jerusalem, and beg alms for my subsistence all my life after."

In spite of these sensible representations, Mr. Bruce set forward, on the 4th of April, 1770, on his journey to the sources of the Nile. On his way he passed by the lake Tsana, the largest piece of water in Abyssinia. It is forty-nine miles in its greatest length, and about thirty-five miles broad; it varies much, however, in

magnitude in the wet and dry seasons. The Abyssinians, who, he harshly says, "are very great liars," report that the islands in this lake are forty-five in number; but he, more accurate in matters of numerical calculation, reduces them to eleven. On the shores of the lake they saw a great number of hippopotami, some swimming in the lake at a small distance, some rising from feeding on the high grass in the meadows, and walking, seemingly at great leisure, till they plunged out of sight.

A few days' journey brought our traveller to the falls of Alata, called in Abyssinia the second cataract of the Nile. The river, here half a mile in breadth, and considerably swelled by the rains, falls down a height of forty feet in one sheet of water, with a force and noise truly terrible. Mr. Bruce is here very anxious to correct Jerome Lobo, who says that he sat under an arch or intervening space between the rock and the stream of water that fell from it. This, according to Bruce, is a downright falsehood; for the water reaches to the foot of the rock, and is in perpetual agitation. But those who would wish to deal more mildly with Lobo may, perhaps, find sufficient grounds of apology for his statement. A few years ago it was possible to creep below the great column of falling water at Niagara; but the wearing of the rock at the edge of the cataract has rendered impossible a feat which subsequent changes of the rocky bed may again permit. But Bruce, though unwilling to admire Lobo's wonders, makes the most of his own: "The cataract of Alata," he says, "was a most magnificent sight, that ages added to the greatest length of human life would not deface or eradicate from his memory: it struck him with a kind of stupor, and a total oblivion of where he was, and of every other sublunary concern. It was one of the most magnificent, stupendous sights in the creation, though degraded and vilified by the lies of a grovelling fanatic peasant."

The journey of Mr. Bruce to the source of the Nile was now interrupted by the bursting of the political

storm. Fazil, a chief of the Galla tribe, took arms against Michael, under pretence of revenging the death of the late king; and many of the Abyssinian nobility joined his standard. The hostile armies met; Michael was defeated, and fled; the insurgents elected a new king, and Fazil was now master of Gondar. Bruce, still bent upon exploring the sources of the Nile, was under the necessity of paying his court to this semi-barbarous chieftain: when admitted to his tent he found Fazil sitting upon a cushion with a lion's skin upon it, and another stretched like a carpet before his feet; he had a cotton cloth like a dirty towel wrapped round his head; there was no other carpet or cushion in the tent, and only a little straw scattered thinly about it. The manners of Fazil were as uncouth as his appearance; and Bruce, whose courage, to judge from his own account, often outran his discretion, had a warm altercation with him on the subject of his proposed visit to the sources of the Nile. On the next morning, however, he breakfasted with the chief of the Galla on honey, butter, and raw beef in abundance. Fazil was propitiated by a few presents; and not only permitted Mr. Bruce to proceed on his journey to the sources of the Nile, but also invested him with the government of the Agow Geesh, the district in which the fountains are situated. But this was not enough: our traveller wanted guides; and with these, likewise, Fazil took care to supply him. "Hear me," says he; "you see those seven people" (our traveller never saw more ill-looking fellows in his life),—"these are all leaders and chiefs of the Galla, savages if you please; they are all your brethren; you may go through their country as if it were your own, without a man hurting you." He then spoke to them in Galla, and they all answered by a wild howl, and struck themselves upon the breast as if assenting. Still further, Fazil gave him his horse bridled and saddled, which he was to drive before him as a sort of passport; for the Galla tribe pay the same respect to the chief's horse as to the chief himself.

Thus completely provided for his journey, Bruce at length reached the Nile at a place where it was only 260 feet broad. He was pleased to find that the Agows, who dwelt upon its banks, still venerated the divinity of the river; they would not allow the party to ride across it on their mules, and even insisted on their taking off their shoes. Our traveller, after being long thwarted in his desire to reach the fountains of the river, by the perverseness of his Galla guides, at length succeeded in his object. When the spot was pointed out to him where the sources of the river were to be found, he ran down in breathless haste till he reached an island of green turf, in the form of an altar, and apparently the work of art: where he stood enraptured over the principal fountain that rises in the middle of it. He describes, with more than usual pomp, the exultation and triumph of his feelings at this moment, "when he stood on that spot which had baffled the genius, industry, and enquiry of both ancients and moderns, for the course of near 3000 years. Kings had attempted this discovery at the head of armies; and each expedition was distinguished from the preceding only by the difference of the numbers who perished in it, and agreed only in the disappointment which uniformly, and without exception, followed them all. Fame, riches, and honour, had been held out, for a series of ages, to every individual of those myriads whom these princes commanded, without having produced one man capable of gratifying the curiosity of his sovereign, or wiping off this stain upon the enterprise and abilities of mankind, or adding this desideratum for the encouragement of geography."

While our traveller gave way to his enthusiastic feelings, and endeavoured to engage the sympathy of Strates his Greek servant, some peasants observing from a distance the gestures and grimaces of the latter, were informed by Woldo, the Galla guide, that the man had been bitten by a mad dog, and was out of his senses. They replied, that he would be infallibly cured by the Nile; but that the custom, after meeting with such a

misfortune, was to drink the water fasting. This remedy for hydrophobia originated probably in the lively fancy of Bruce himself.

He enters into a minute description of the three fountains which constitute what he is pleased to call the sources of the Nile. They were regarded by the Agows, the inhabitants of the district, with a veneration equal to that felt by the English traveller. They annually sacrifice a black heifer at the principal fountain; and having carefully washed it with the water of the river, distribute it in stated portions to the heads of the clans, who, having made an end of their feast, collect the bones together, and burn them to ashes. They always lay aside their shoes or sandals on approaching the bog where the Nile rises; nor do they use the water of that sacred river to wash themselves, or their clothes, but repair for that purpose to a little stream that joins the Nile lower down. Our traveller ascertained, by astronomical observations, the precise situation of these fountains; and from observations with a barometer he was led to conclude that the plain in which they are situated is more than two miles above the level of the sea.

The grand object of our traveller's ambition being thus attained, he began to think of his return home; but the intestine divisions of the country for some time threw impediments in the way of his departure. He at length, however, set out to reach Egypt by way of Sennaar and through the deserts of Nubia. This dangerous journey occupied him eleven months; but with his arrival at Syene in Egypt his troubles were at an end; and on the 10th of January, 1773, he reached Grand Cairo, whence he had no difficulty in returning home.

Bruce has the merit of being among the first to make a long and perilous journey, at his own expense, merely for the purpose of discovery. He again recalled to notice the long agitated question of the sources of the Nile; but on the first publication of his travels his credit was violently assailed, and it was not perfectly re-

established until his narrative was confirmed in all material points by the testimony of more recent travellers, particularly lord Valentia and Mr. Salt. If it be admitted that Bruce in no instance amuses his reader with mere inventions, it must, on the other hand, be allowed that he writes with a levity and a tone of bravado which operate much to his disadvantage. In every page of his volumes he shines as a hero; and, by his total want of sobriety, he gradually and inevitably alienates the confidence of his reader. His great boast was, that he had discovered the sources of the Nile; but he disingenuously conceals from his reader that the Nile, whose sources had been in all ages an object of curiosity, was the *Bahr el Abiad*, or White River, flowing from the west. He admits, in the course of the narrative, that this river far exceeds in magnitude the *Bahr el Azergue*, or Blue River, which descends from Abyssinia, and whose fountains he had explored. He also endeavoured to conceal from the public, and even from himself, the fact, that the sources of the Bahr el Azergue had been formerly visited by the Portuguese traveller, Payz, who describes the mountains of Geesh, the ceremony of sacrificing a cow to the river, and the cataract of Alata, nearly in the same terms as Bruce himself. He indulges, also, in the same expressions of exultation in having discovered what eluded the search of so many heroes of antiquity. Thus Bruce, though he did not deceive the world as to matter of fact when he stated that he had visited the sources of the Nile, yet was guilty of dealing dishonestly with the question, and of purposely concealing whatever might lessen the brilliancy of his achievement.

CHAP. XXIII.

PARK'S TRAVELS.

THE AFRICAN ASSOCIATION. — LEDYARD. — LUCAS. — HOUGHTON. — MUNGO PARK ENGAGED TO TRAVEL TO THE NIGER. — HIS RECEPTION FROM THE KING OF BONDOU. — OBLIGED TO PRESENT HIS COAT. — INTERVIEW WITH THE KING'S WIVES. — KINDNESS AND GAIETY OF THE NEGROES. — ACCOUNT OF THE LOTUS. — MR. PARK TAKEN BY THE MOORS. — HIS SUFFERINGS AND ESCAPE. — HIS JOURNEY THROUGH THE DESERT. — FIRST VIEW OF THE NIGER. — SEGO. — SONG OF THE NEGRO WOMEN. — BAMBARA. — VEGETABLE BUTTER. — MR. PARK OBLIGED TO TRAVEL ON FOOT. — HIS ARRIVAL AT SILLA. — INFORMATION RESPECTING THE GEOGRAPHY OF THE INTERIOR. — HE IS OBLIGED TO RETURN. — HIS DISTRESS. — JOINS A KAFILA. — RETURNS TO THE COAST. — HIS SPECULATIONS RESPECTING THE OUTLET OF THE NIGER. — PROCEEDS ON HIS SECOND JOURNEY. — THE EXPEDITION NEARLY ROUTED BY BEES. — GOLD PITS. — SICKNESS ATTENDING THE RAINY SEASON. — THE EXPEDITION EMBARKS ON THE NIGER. — RECEPTION IN BAMBARA. — PARK BUILDS A BOAT AT SANSANDING. — STATE OF THE EXPEDITION. — THEY PROCEED DOWN THE RIVER. — THEIR FATE.

THE close of the eighteenth century was distinguished for an extraordinary ardour in the pursuit of geographical discoveries. Navigation had assumed a boldness which naturally gave an impulse to geographical enquiries; and while our ships visited the remotest parts of the globe, it seemed disgraceful that we should still remain in ignorance of the interior of Africa. To promote discovery in this quarter, a society was formed in 1778, and named the African Association. Its object was to employ persons of enterprise and intelligence to explore those unknown countries; supplying them with *funds*, and directing the movements in such a way as to lead to the most advantageous results. With the formation

of this society begins a new era in the history of African discovery.

The first person despatched by the Association was Ledyard, who had attempted, as before noticed, to travel over land to Kamtschatka with the intention of proceeding across the American continent to the United States. He arrived at Cairo in August, 1778, and employed himself for some time in collecting information from the dealers in the slave-markets at Cairo, and in making himself acquainted with the manners of the people. He was ready to proceed by a caravan to Sennaar, whence he intended to go westward towards the Niger, when he was seized with a bilious complaint, which terminated his life.

Mr. Lucas, the next person employed by the African Association, had resided sixteen years in Morocco, where he acquired a perfect knowledge of the Arabic language. The offer of his services being accepted by the Association, he left Tripoli in February, 1789, with the caravan for Fezzan, situated in the heart of the great desert. Of its capital, Morzouk, he gave an excellent description; and obtained from the people much valuable information respecting the country beyond the desert.

The difficulties attending the journey across the Sahara drew the attention of the Association to the populous districts along the Gambia, by which it was justly supposed that the country of the Niger might be reached by a shorter route. In 1791, major Houghton proceeded through the Mandingo country to Bambook. From this place he set forward to pursue his route to Tombuctoo; but at Jarra, or Yarba, he was robbed and murdered by the Moors, or, according to other accounts, died of a dysentery.

The failures of Ledyard and Houghton did not discourage the African Association, nor did they meet with any difficulty in finding persons sufficiently animated with the spirit of enterprise to engage in the undertaking. Surrounded as it was by manifest danger, Mr. Mungo Park, a native of Scotland, who had paid a visit to the

East Indies, and was inflamed with the desire of exploring unknown countries, voluntarily offered himself to the Association; and they, finding him to possess the requisite courage and intelligence, readily embraced his offer.

On the 21st of June, 1795, Mr. Park arrived at Jillifree, on the northern bank of the Gambia; and then proceeded to Pisania, where he resided for some time in the house of Dr. Laidley, employing himself in the study of the Mandingo language, in learning the productions and customs of the country, and in endeavouring to collect information respecting the geography of the interior from the negro merchants, who, perhaps from commercial jealousy, were all averse to his proposed journey. On the 2d of December he set forward, attended by two negro servants, Demba, a sprightly youth, acquainted with some of the languages of the interior, and Johnson, who had been a slave at Jamaica, where he had learned the English language. He was accompanied, likewise, by two black *slatees*, or slave merchants, and two negroes: one of them a blacksmith, who had been some years employed by Dr. Laidley, and was now about to return to his native country. All these attendants looked up to him with respect, and relieved the fatigue of the journey by their cheerfulness and good humour. The negroes travelled on foot, driving their asses before them. Mr. Park rode a small but hardy and spirited horse: his baggage consisted of provisions for two days; a small assortment of beads, amber and tobacco, for the purchase of a fresh supply; a few changes of linen, and other necessary apparel, an umbrella, a pocket sexant, a compass, and a thermometer, with two pairs of pistols, and two fowling-pieces.

In three days the travellers arrived at Medina, the capital of Woolli; a town of 1000 houses, surrounded with a wall of clay, and a fence of sharpened stakes and prickly bushes. The aged king gave Mr. Park a kind reception, but warned him not to persist in the prosecution of so dangerous a journey. Here Mr. Park hired

three elephant hunters to accompany him as guides through the wilderness that extends from Woolli to the frontiers of Bondou. When he arrived at Fatteconda, the capital of that kingdom, he was obliged immediately to repair to the presence of the king. Dreading the well known rapacity of this prince, Park took with him one canister of gunpowder, some amber, tobacco, and his umbrella, as presents; and put on his new blue coat, in order to preserve it. The king, who supposed that all white men are merchants, was surprised to hear that Mr. Park did not wish to purchase any slaves or gold: he could not be brought to comprehend that he travelled from motives of curiosity. The presents gave him much pleasure; and particularly the umbrella, which his majesty repeatedly furled and unfurled, to the great admiration of his attendants. He commenced a long oration in praise of white men, extolling their great riches and humanity; and he then proceeded to a very pointed eulogium on Mr. Park's blue coat, not forgetting the yellow buttons, which had particularly caught his fancy; and he hinted that, if it were given to him, he would wear it on all public occasions, and inform all the world of the donor's generosity. Park felt that this request was equivalent to a command, and sorrowfully laid his new blue coat at the feet of the king, who, in gratitude, furnished him with provisions, and exempted him from duty at the custom-house.

The next morning Mr. Park was informed that the king's wives wished to see him. "I had no sooner entered," he says, "the court appropriated to the ladies, than the whole seraglio surrounded me; some begging for physic, and some for amber, and all of them desirous of trying that great African specific, blood-letting. They were ten or twelve in number, most of them young and handsome, and wearing on their heads ornaments of gold and beads of amber. They rallied me with a good deal of gaiety on different subjects, particularly on the whiteness of my skin, and the prominency of my nose. They insisted that both were artificial: —

the first, they said, was produced when I was an infant, by dipping me in milk; and they insisted that my nose had been pinched every day till it had acquired its present unsightly and unnatural conformation. On my part, without disputing my own deformity, I paid them many compliments on African beauty. I praised the glossy jet of their skins, and the lovely depression of their noses; but they said that flattery, or, as they emphatically termed it, 'honey mouth,' was not esteemed in Bondou. In return, however, for my company, or my compliments, to which they seemed not so insensible as they affected to be, they presented me with a jar of honey, and some fish, which were sent to my lodging."

On leaving Fatteconda, the road lay through a country so much infested with robbers that it was thought expedient to travel through it by night. Not a word was uttered during this part of the journey; the howling of wild beasts alone disturbed the deep solitude of the forest. Wolves and hyenas were seen gliding like shadows from one thicket to another. At Joag, the next town he arrived at, Mr. Park was plundered of a large share of his property by the *dooty* or magistrate of the place. As he was sitting here, listlessly chewing straws, an old female slave asked him, as she passed by, whether he had got his dinner: he made no reply, not understanding the drift of her question; but when his boy answered that the king's officers had robbed him of all his money, the kind-hearted slave took her basket from her head, and presented him with some handfuls of ground nuts. The next morning our traveller left Joag in company with the nephew of the king of Kasson, who offered to conduct him to the latter place. In the evening he reached Samee, on the banks of the Senegal, which is here a beautiful but shallow stream running over a bed of sand and gravel.

As the party approached Jumbo, the native town of the blacksmith who accompanied Mr. Park, a number of the inhabitants came out to meet their countryman, whom they conducted into the town with songs

and dances. A minstrel who headed the procession, extolled in extemporaneous verse the virtues of the blacksmith, and exhorted his friends to give him a sumptuous feast. The affectionate joy with which the negro was welcomed home by his friends highly interested Mr. Park, who retired a little from the crowd to observe their movements. The blacksmith then went on to relate his adventures, making frequent mention of the kindness of the white man; and at the conclusion of his story he pointed to Mr. Park, and exclaimed, "See him sitting there!" The eyes of all were now turned upon the stranger, whom they viewed with surprise, not wholly free from apprehension; but the blacksmith assured them that he was quite inoffensive; and our traveller spent a whole day with these worthy people in feasting and merriment.

Mr. Park was favourably received by the king of Kasson, who furnished him with a guide to Kemmoo, the capital of Kaarta. The direct road to this place was now rendered impracticable by the wars which desolated the interior; so Mr. Park had no alternative but to take the circuitous route through the Moorish kingdom of Ludamar. At the commencement of this journey, he saw, for the first time, the people gathering *tomberongs*, the fruit of the *rhamnus lotus*. They are small farinaceous berries, of a yellow colour and delicious taste. The natives convert them into a sort of bread, by exposing them for some days to the sun, and afterwards pounding them gently in a wooden mortar, until the farinaceous part of the berry is separated from the stone. This meal is then mixed with a little water, and formed into cakes, which, when dried in the sun, resemble in colour and flavour the sweetest gingerbread. This shrub is found on the northern coast of Barbary; and there can be little doubt that it was the food of the *lotophagi* of antiquity.

From Jarra, or Yarba, Mr. Park despatched all his papers by his servant, Johnson, to the Gambia, and proceeded on his journey to the Moorish town of Be-

nowm. He found it to consist of a great number of tents, scattered irregularly over a large extent of ground, and divided by herds of camels, cattle, and goats. From the Moors he experienced the most brutal treatment. The chief, an old sullen Arab, surveyed him with attention, but scorned to speak to him. The ladies were far more inquisitive: they asked a thousand questions; searched his pockets, opened his waistcoat to examine the whiteness of his skin; and even counted his toes and fingers, as if they doubted whether he was a human being. Mr. Park was lodged in the same hut with a wild hog, placed there on purpose to annoy the Christian. His clothes, instruments, and every thing that belonged to him, were taken possession of by Ali, the Moorish chief, whose superstitious fears, however, were awakened, when he observed that the magnetic needle always pointed to the Great Desert. To explain this phenomenon, Mr. Park informed him that his mother resided far beyond the sands of Sahara, and that while she was alive the piece of iron would always point that way, and serve as a guide to conduct him to her; and that if she were dead it would point to her grave. The Moor was now doubly astonished; and after viewing the compass a long time with attention, he returned it to the owner, afraid of keeping in his possession so dangerous an instrument.

The sufferings of our traveller continued without alleviation, until he was introduced by Ali to Fatima his queen. She was an Arab woman, with long black hair, and remarkably corpulent. Though shocked at first at the sight of a Christian, she soon took pleasure in his intelligence, and contributed not a little, by her humanity, to mitigate the hardships of his slavery. Through her interest Mr. Park was permitted to accompany Ali in a journey which he made to Jarra. While he remained there, the king of Kaarta approached with an army to punish the rebellious inhabitants, who took to flight in the utmost confusion; and Park at the same time contrived to escape from the Moors. No-

thing could exceed his joy when he found himself in the wilderness, beyond the reach of his pursuers. He was without food, and knew not where to find water: but these miseries seemed light in comparison with those from which he had escaped. He proceeded east-south-east through the forest; but excessive thirst and fatigue at length overcame him, and he fell down on the sand in a state of insensibility. Towards evening a violent shower of rain gave him some relief; and in a negro village at which he arrived, the charity of an old woman supplied him with a good meal. He soon after entered the kingdom of Bambara: the people mistook him for a Moor, and seeing him in such a miserable plight, and driving his horse before him (for the poor animal was no longer able to carry him), asked him in ridicule whether he was come from Mecca.

He travelled in company with a party of fugitive Kaartans, expecting every moment to see the Niger: at length one of the negroes called out *Geo-affilli!* see the water! and he then beheld, with infinite pleasure, the great object of his mission, the long-sought Niger, glittering in the morning's sun, as broad as the Thames at Westminster, and flowing slowly to the eastward. "I hastened," he says, "to the brink, and, having drank of the water, lifted up my fervent thanks in prayer to the great Ruler of all things, for having thus far crowned my endeavours with success." Sego, the capital of Bambara, at which he was now arrived, was an extensive city of 30,000 inhabitants: the houses were built of clay, some of them with two stories, and many of them whitewashed; the numerous canoes upon the river and the bustle of the population gave the place an air of civilisation that our traveller did not expect to find in the heart of Africa. While he was waiting for an opportunity to cross the river, he received a message from the king desiring him to desist from the attempt, and refusing to see him until he knew what brought him into the country. The messenger likewise advised Mr. Park to seek a lodging in an adjoining village, which he

pointed out; but here our poor traveller found, to his great mortification, that no one would admit him into his house: he was regarded with astonishment and fear, and was obliged to sit all day in the shade of a tree without tasting food. He feared also that he should be obliged to spend the night in the open air, though the neighbourhood was infested with wild beasts. The manner in which he was relieved from this distressing situation is related by him in the following words:—

"About sunset, as I was preparing to pass the night in this manner (in the branches of a tree), and had turned my horse loose that he might graze at liberty, a woman returning from the labours of the field stopped to observe me; and, perceiving that I was weary and dejected, enquired into my situation, which I briefly explained to her; whereupon, with looks of great compassion, she took up my saddle and bridle, and told me to follow her. Having conducted me into her hut, she lighted a lamp, spread a mat on the floor, and told me I might remain there for the night. Finding that I was very hungry, she said she would procure me something to eat; she accordingly went out, and returned in a short time with a very fine fish, which, having caused to be half-broiled upon some embers, she gave me for supper. The rights of hospitality being thus performed towards a stranger in distress, my worthy benefactress, pointing to the mat, and telling me that I might sleep there without apprehension, called to the female part of her family, who had stood gazing on me all the while in fixed astonishment, to resume their task of spinning cotton, in which they continued to employ themselves great part of the night. They lightened their labour by songs, one of which was composed extempore, for I was myself the subject of it. It was sung by one of the young women, the rest joining in a sort of chorus. The air was sweet and plaintive, and the words literally translated were these:—

"'The winds roared, and the rains fell. The poor white man, faint and weary, came and sat under our tree.

He has no mother to bring him milk, no wife to grind his corn. *Chorus.* Let us pity the white man, no mother has he,'" &c. &c. The only recompense Mr. Park could offer to this charitable woman, at his departure next morning, was four brass buttons off his waistcoat.

The king of Bambara refused to admit Mr. Park to a personal interview, perhaps from a fear that by so doing he might embroil himself with the Moors: he ordered him to depart from Sego, but at the same time sent him 5000 cowries (equal to about one pound sterling), wishing, as he said, *to* relieve a white man in distress. The negro inhabitants of this country appear to be a kind-hearted, hospitable, and communicative race; security and good government are alone required to raise them into civilisation. The large town of Kabba, at which Mr. Park next arrived, was situated in the midst of a beautiful and highly cultivated country, bearing some resemblance to the midland counties of England: here the people were all employed in collecting the fruit of the shea tree, from which they prepare their vegetable butter. The shea tree very much resembles the American oak, and the fruit is not unlike the Spanish olive. The butter produced from the kernel, "besides the advantage," says Mr. Park, "of its keeping the whole year without salt, is whiter, firmer, and to my palate of a richer flavour, than the best butter I ever tasted made from cow's milk." This commodity, which is produced in great abundance in Bambara, is the chief article of their inland commerce.

Pursuing his journey from this place through numerous villages inhabited by fishermen, he arrived at the populous town of Sansanding, a place of considerable trade, and much resorted to by the Moors, who treated our poor traveller with their usual insolence and brutality. He saw on the river here several large canoes loaded with merchandise, and covered over with mats. The kindness of his negro landlord compensated in some measure the insults of the Moors; the hospitable negro desired no better payment than a *saphie* or charm: "If

a Moor's saphie is good," said he, "a white man's must needs be better." Mr. Park assented to his request, and wrote for him the Lord's Prayer on a thin piece of board.

Beyond this place part of the journey lay through a plain infested with wild beasts; and the sight of some large lions crouching among the bushes, filled our traveller with dismay; but this anxiety and alarm gave way to feelings of calm delight at the sight of Modiboo, a beauteous village on the banks of the Niger. The river is here of a majestic breadth, encompassing numerous green islands, the peaceful retreat of Foulahs, whose cattle are secured by their situation from the depredations of wild beasts; and the view is altogether one of the most enchanting in the world. Having spent the night here, Mr. Park proceeded in the morning on his journey to Kea, being by this time robbed of all his clothes save what he carried on him, and these were now worn to rags. He was sick and weary; and while he was little able to walk, his horse was still less able to carry him. About six miles beyond Modiboo the poor animal fell from weakness, and it was found impossible to set him on his legs again. "I sat down for some time," says Mr. Park, "beside this worn-out associate of my adventures; but finding him still unable to rise, I took off the saddle and bridle, and placed a quantity of grass before him. I surveyed the poor animal as he lay panting on the ground, with sympathetic emotion; for I could not suppress the sad apprehension that I should, myself, in a short time, lie down and perish in the same manner, of fatigue and hunger. With this foreboding I left my poor horse." At Kea, a fishing village, he experienced a surly reception from the dooty or chief magistrate; but he luckily met with a fisherman, who consented to carry him down the river in his canoe. Towards evening he arrived at Silla, a large town on the southern bank, where he was surrounded till dark by crowds of wondering negroes. Here he had a slight attack of fever; and when he considered that he was pennyless, ill clad, exposed to the

insults of the Moors, and that he had a journey of many hundred miles to perform on foot, in order to reach the Gambia, his heart sank within him, and he almost despaired of ever being able to effect his return; but he determined at all events to proceed no farther eastward. He endeavoured, therefore, to collect from the negro traders what information he could, respecting the countries farther down the river. From them he learned that two days' journey from Silla is the town of Jenné, standing on an island in the Niger, and containing more inhabitants than Sego. At the distance of two days more, the river spreads into a great lake called *Dibbie*, or the Dark Lake, so large that canoes, in crossing it from west to east, lose sight of land for one whole day. In issuing from this lake the river divides itself into several branches; the two chief of which, after encircling a great island called Jinbala, meet again at Kabra, the port of Tombuctoo, from which it is one day's journey distant. The whole distance by land from Jenné to Tombuctoo is ten days' journey.

From the information which Mr. Park received, it would appear that Tombuctoo is a Moorish city; but he learned that Houssa, the capital of the kingdom of the same name, situated farther to the eastward, was larger and more populous than Tombuctoo: there, also, the government was in the hands of the Moors. None of the merchants whom he consulted could give him any account of the termination of the Niger. They described its great length in vague and hyperbolic terms, saying they believed "it ran to the world's end."

On his return from Silla, Mr. Park had the good fortune to recover his horse; but the difficulties that awaited him on his journey back were far greater than he had anticipated. The motives of his journey became more suspected. He was obliged to avoid Sego, and prosecute his journey along the banks of the Niger; often obliged to wade through deep marshes, with little food, and in constant apprehension from wild beasts. At Wonda he lay for several days in a fever, occasioned by fatigue,

anxiety, exposure to the night air, with little food, and almost without clothes. On leaving this place, he repaid the lukewarm kindness of his landlord by presenting him with his horse. The country he afterwards passed through suffered severely from famine, and he wholly depended for subsistence on the charity of the negroes, who were themselves nearly starving. At length he joined a kafila, or caravan of slaves, proceeding to the Gambia, and the slatee, or slave merchant, willingly agreed to provide for him during the journey, on condition of receiving a suitable reward when they reached the coast. Among the slaves he recognised a man whose hospitality he had experienced at Karankalla. The poor negro observed, with a sigh, "The irons were not then upon my legs." On the 5th of June, Mr. Park arrived at Jindey, where he had parted from Dr. Laidley eighteen months before.

The sufferings which Mr. Park had experienced in his former journey did not at all shake his courage, or induce him to shrink from the dangers of African discovery. After his return to England, he became acquainted with a gentleman who had often visited, as a trader, the mouth of the river Congo, and the coasts in its vicinity. They were mutually pleased at each other's discoveries; and, while each speculated on the great river he had seen, their views gradually came to coalesce, so that they at length arrived at the conclusion that the Niger, after a circuitous course through central Africa, discharges itself into the sea by the channel of the Congo. This supposition formed the basis of the plan of operations which Mr. Park proposed to follow, when, in 1804, he was appointed by government to command a new expedition to explore the course of the Niger. He proposed to enter Bambara by his former route. There he was to construct two boats forty feet long and eight feet broad, with which he was to navigate down to Wangara, and thence reach the sea by Congo. He required, in order to carry his plan into execution, thirty-six Europeans, of whom six should be artificers and the rest soldiers; asses, to convey the

baggage; tools, for constructing the boats; besides merchandise, and numerous articles to distribute in presents or for trade. Government liberally granted him all that he demanded, and an ample remuneration was secured to him in case of his ultimate success.

Mr. Park arrived at Goree on the 28th of March, 1805; and some time being employed in preparations, he began his journey from Pisania, on the Gambia, on the 27th of April. To his impatience in thus setting forward on so arduous an undertaking at the commencement of the wet season, may, in a great measure, be ascribed his subsequent misfortunes, and the total failure of the expedition. In passing through the wilderness of Tenda, the people unfortunately disturbed a large swarm of bees, which, issuing forth, put their assailants completely to the rout. In the confusion which ensued, the fire spread through the dry grass, and threatened to consume the baggage; so that for half an hour the expedition appeared terminated by the attack of the bees. Some of the cattle died from the stings, and none escaped unhurt. On the 8th of June they experienced the first tornado, the usual forerunner of the periodical rains; and with this visitation began their train of sorrows. The ground was now covered with water, the heat intolerable; and on the third day after the commencement of the rains, twelve men were on the sick list. The negroes, hearing that the white men who passed through their country were sickly and distressed, and that they carried with them immense riches, which they were unable to defend, lost no opportunity of trying to despoil them. In the mountainous country of Konkodoo, Mr. Park had the opportunity of visiting several gold pits, and of observing the way in which the natives collect and prepare that precious metal. The country was richly cultivated, and the most picturesque he had ever seen; but the beauty of the landscape could not win his mind from dwelling on the state of the expedition, which was now melancholy in the extreme. Half of the men were sick, and lay

down on the road, refusing to proceed. The natives, seeing their weakness, grew more bold and daring. As the party proceeded, every day added to their distress. Mr. Park himself was afflicted with a fever; but in the midst of all these sufferings his enthusiasm still supported him; and when, on the 27th of July, he had a distant view of the mountains to the south-east, "the certainty that the Niger washed the southern base of these mountains made him forget his fever, and he thought of nothing but how to climb over their blue summits." Near this place died the last of the forty asses which they had brought with them from the coast. Every day some of the men were either buried or abandoned. On the 19th of August, Mr. Park reached the summit of the mountain ridge which separates the Niger from the remote branches of the Senegal; and from the brow of the hill "he once more saw the Niger rolling its immense stream along the plain." But the joy that he might have derived from this prospect was marred by the most melancholy reflections. Of thirty-eight men who had accompanied him from the Gambia, only seven remained; all sick, and almost all despairing of recovery. He hired a canoe to carry him down the river, which was from one to two miles broad, and flowing at the rate of five knots an hour. The Niger is here called by the natives the *Joliba* or Great River. Apprehensions were for some time entertained *lest* they should not be permitted to pass through the kingdom of Bambara. The natives, it appeared, were unable to comprehend the motives of those dangerous journeys, and viewed them with suspicion; but Park, by an ingenious address, completely removed the scruples of the king's prime minister. "You know," he said, "that the white people are a trading people, and that all the articles of value which the Moors and the people of Jenné bring to Sego are made by us. If you speak of a good gun; who made it? The white people. We sell them to the Moors; the Moors bring them to Tombuctoo, where they sell them at a higher rate:

the people of Tombuctoo sell them to the people of Jenné at a still higher price; and the people of Jenné sell them to you." These arguments, seconded by a splendid present of two double-barrelled guns, and some other articles, secured our travellers the favour of the court, and permission to build a boat at Sansanding. Three old canoes were patched together, so as to form a boat of about forty feet long and six broad, which was named *His Majesty's Schooner the Joliba*. Before the boat was finished, however, Park met with a severe blow in the death of his relation and companion, Dr. Anderson. This, he says, was the first event during the journey which threw the smallest gloom over his mind. "He then felt himself left a second time lonely and friendless amidst the wilds of Africa."

On the 17th of November, 1805, this adventurous traveller left Sansanding on his voyage down the river. His party was now reduced to four Europeans besides himself, lieutenant Martin and three soldiers, one of whom was in a state of derangement. Isaaco, his negro attendant, brought back his letters and journal to the Gambia, but no further intelligence was received of himself.

From the information collected by captain Clapperton, it appears that Park and his companions descended the river from Tombuctoo to a town called Boussa. The sultan of Youri, to whom they sent presents from this place, offered to supply them with guides to conduct them through the rocks which impede the navigation of the river a little below the town; but they, instead of paying attention to this offer, set off at night, and the boats soon after struck on the rocks. The people on both sides of the river began to assail them with arrows, and the two white men jumped into the water and were drowned. Some books and papers, according to the same account, remained in the boat; and one of the books was said to be still in the possession of the sultan of Youri.

CHAP. XXIV.

DENHAM AND CLAPPERTON'S TRAVELS.

HORNEMANN.—HIS FATE.—ADAMS VISITS TOMBUCTOO.—DOUBTS AS TO HIS JOURNEY. — EXPEDITION OF CAPTAIN TUCKEY. — ARRIVAL AT THE CONGO. — THE CATARACT OF YELLALA. — APPEARANCE OF THE RIVER. — FATAL TERMINATION OF THE EXPEDITION. — JOURNEYS OF MAJOR PEDDIE; CAPTAIN CAMPBELL; MR. RITCHIE. — THEIR UNHAPPY RESULTS. — DENHAM AND CLAPPERTON CROSS THE GREAT DESERT. — LAKE TSHAD. — ARRIVAL AT KOUKA. — THE SHEIKH EL KANEMY. — EXPEDITION TO MANDARA. — ANGORNOU. — DEATH OF LIEUTENANT TOOLE. — CLAPPERTON GOES TO KANO. — APPEARANCE OF THE COUNTRY. — ARRIVAL AT SOCKATOO. — THE SULTAN BELLO. — HIS SUSPICIONS OF THE ENGLISH. — HIS PROMISES. — HIS MAP OF THE NIGER. — INFORMATION RESPECTING PARK. — RETURN OF DENHAM AND CLAPPERTON. — DEATH OF MR. TYRWHIT. — CLAPPERTON'S SECOND JOURNEY. — HE REACHES SOCKATOO FROM BENIN. — ILL RECEIVED. — HIS DEATH. — RESULTS OF HIS TRAVELS. — MAJOR LAING REACHES TOMBUCTOO — ASSASSINATED. — TRAVELS OF CAILLIÉ. — HIS ACCOUNT OF TOMBUCTOO.

THE calamitous termination of Park's second journey might have been thought sufficient to damp the ardour of even the most enterprising; but the impulse of curiosity, and the encouragement of hope, still prompted many to face the dangers of a tropical climate, and of a journey through suspicious and bigotted nations. In 1798, Frederick Hornemann, a German of good education, was engaged by the African Association to attempt to penetrate to the Niger from the eastward. In September of that year he joined the caravan from Cairo to Fezzan. Of this ancient caravan route he has given an excellent description. From Morzouk he paid a short visit to Tripoli, and then returned to the capital of Fezzan, with the intention of pursuing his journey into the interior. But after his departure from Morzouk no further intel-

ligence was received from him. Major Denham learned that he penetrated as far as Nyffé, on the Niger, where he died of sickness brought on by the climate.

The great object of European research in the interior of Africa was first visited, in 1811, by a seaman named Adams, who, being shipwrecked on the African coast, was taken prisoner by the Moors, and, after a variety of adventures in his servitude, was at length carried to Tombuctoo. He remained there for six months, when he was again carried across the desert by the Moors, and ransomed by the British consul at Mogadore. After residing some time in London, in a state of extreme poverty, his adventures reached the ears of a gentleman who took much interest in African affairs. Adams was then strictly examined as to what he had seen in the interior of Africa, and the result published. But the account which Adams gives of Tombuctoo did not satisfy the high expectations that were formed of that long sought city; and doubts were thrown on the authenticity of his narrative. The objections raised to his story, however, are more specious than solid. His narrative begins in 1810; whereas it is known that the shipwreck which threw him on the coast of Africa did not take place till 1811. This, however, is a mistake, and not a fiction; and does not at all affect the consistency of the remainder of his story. It is also said, that his shipmates have deposed that he was never separated from them during his captivity with the Moors: but in answer to this it may be said, that more confidence is due to a narrative the invention of which would suppose a considerable degree of knowledge and ability, than to the depositions of seamen, who, if called upon by either party to lend the aid of their testimony, would, under such circumstances, readily aver whatever they found agreeable.

After the late war, when the British government made so many exertions to extend the circle of geographical knowledge, the grand object of reaching the interior of Africa was not overlooked. The persuasion which guided Park in his last expedition had not lost its influence, and

it was determined to proceed by exploring the river Congo from the sea as far as possible. For this purpose an expedition was despatched, in 1816, under the command of captain Tuckey, a distinguished officer, who was accompanied by Mr. Smith, an eminent botanist, and several other gentlemen of scientific abilities. The ships reached the mouth of the Congo in the beginning of July, and proceeded a little way up the river. It was found advisable, from the strength of the current, to leave the ship, and to proceed up the river in the boats. When they had advanced about 150 miles from the mouth of the river, they arrived at the Yellala's Wife, a cataract or rapid extending nearly across the river. The party were therefore obliged to leave the boats, and pursue their journey by land. A few miles farther on they found the Yellala, or Great Cataract, which is in reality only a rapid, but at the same time so violent as to put a stop to the navigation of the river. Near these rapids the Congo was extremely contracted in its channel, and did not appear to pour down a large volume of water; but about twenty-four miles above Yellala it opened into a noble stream, sometimes three or four miles wide: the scenery on its banks being at the same time highly picturesque and varied. But now, when a ray of success seemed to gleam on the expedition, their calamities commenced; one by one the party were attacked by fever, and obliged to proceed to the ship. They began their return, when they had advanced about 280 miles from the mouth of the river. "Terrible march," exclaims captain Tuckey, "worse to us than the retreat from Moscow!" Mr Smith the botanist, Mr. Cranch the zoologist, Mr. Tudor the geologist, and Mr. Galwey, a gentleman of science who volunteered his services to the expedition, all died soon after they reached the ship; and captain Tuckey himself did not long survive his companions. Thus terminated this unfortunate expedition, another large sacrifice to the cause of African discovery.

In the mean time an expedition had been despatched, under major Peddie, to reach the Niger by the usual

route of the Gambia, and to ascend that river, which it was hoped would enable him to form a junction with captain Tuckey's party. In November, 1816, the party, consisting of 100 men and 200 animals, landed at Kakundy on the Rio Nunez. Here major Peddie was attacked with fever, and died in a few days. Captain Campbell, on whom the command devolved, proceeded to the frontiers of the Foulahs, where he was detained for some months by the jealqusy of the natives, who were alarmed at seeing so large a party of white men about to enter their country. Their cattle all perished, and they were obliged to return to Kakundy, where captain Campbell died soon after, worn out by fatigue and vexation. Lieutenant Stokoe, his successor in the command, sunk in like manner under the deadly influence of the climate.

While these ill fated exertions were made to reach the interior of Africa from the west, the British government did not overlook the opportunity that seemed to be offered by the friendly disposition of the pashah of Tripoli. In March, 1819, Mr. Ritchie, accompanied by lieutenant Lyon, proceeded from Tripoli to Fezzan, with the intention of accompanying one of the expeditions which the pashah promoted through all the country to the southward, as far as Soudan, for the purpose of procuring slaves; but the climate of Morzouk proved fatal to Mr. Ritchie; and the health of Mr. Lyon being also seriously affected, he was unable to proceed farther than the southern frontiers of Fezzan, whence he returned to Tripoli, with a large stock of hearsay information respecting the country beyond the desert.

Notwithstanding the unhappy failure of this attempt, and the fate that seemed inevitably to await all who endeavoured to solve the great mysteries of African geography, government was still determined to try the success of another expedition, from Tripoli, across the Great Desert, to Bornou; a route which the British consul asserted was as open as that from London to Edinburgh. Major Denham, lieutenant Clapperton, of the navy, and

Dr. Oudney, a naval surgeon sufficiently conversant with natural history, were the persons selected for this perilous mission. They arrived, on the 8th of April, 1822, at Morzouk, the capital of Fezzan, where they luckily became acquainted with Boo Khaloom, a wealthy merchant, who was preparing to travel across the desert to Bornou, and who readily offered to become their guide in the journey. In an excursion westward from Morzouk, Dr. Oudney had an opportunity of observing the manners of the Tuaricks, a fine people, whose dominions are confined within the limits of the desert, and who view with sovereign contempt the inhabitants of cities. On the 29th of November, 1822, our travellers left Morzouk on their journey across the desert: it was undertaken with favourable circumstances, and was accomplished, without any accident of importance. On the 5th of February, the waters of Lake Tshad, the receptacle of the rivers of Bornou, were discovered by our delighted travellers. Major Denham hastened, in the morning, to the water's side, and found the shore covered by multitudes of water-fowls of all descriptions, and so unused to be disturbed that his presence caused them no alarm. Fish is so abundant in the lake that the women catch them by wading in a little distance, and then driving them on shore.

On the 17th of February the caravan arrived at Kouka, the capital of Bornou; and our travellers, with anxious hearts, remained for some time on horseback at the gate of the palace, while the form of their reception was arranged within. After some delay, they were admitted into the presence of the Sheikh el Kanemy, the dictator of Bornou, into whose hands the necessities of the state had thrown the supreme power. He was found in a small dark room, sitting on a carpet, plainly dressed, in a blue gown and shawl turban: his personal appearance was prepossessing: he was apparently not more than forty-five or forty-six, with an expressive countenance and benevolent smile. He asked our officers what was their object in visiting his country: to which

they replied, "Merely to see it, and to give an account of its inhabitants, produce, and appearance; as their sultan was desirous of knowing every part of the globe." At a second interview, they presented to him the gift sent by the English government. The sheikh was gratified at the assurance that the king of England had heard of Bornou and of himself; and turning to one of his attendants, he observed, "This is in consequence of our defeating the Begharmis." Upon this, a chief who had distinguished himself in the war alluded to, demanded, "Has he ever heard of me?" to which our travellers very promptly answered in the affirmative.

Huts were built for the English near the palace, and they experienced an extent of hospitality which seems characteristic of the interior of Africa: besides occasional presents of bullocks, camel-loads of wheat and rice, leathern skins of butter, and jars of honey, they had a daily allowance of rice mixed with meat, and savoury paste made of barley flour. The market of the town, which assembled at least 15,000 persons, exhibited to our travellers all the productions and manufactures of the country, with a great variety of African costume.

As the English officers became better acquainted with the sheikh, he rose in their estimation, and gave new proofs of his friendly disposition: he was delighted beyond measure with rockets, which were fired off to amuse him, and which struck what he considered a wholesome terror into his people. Hillman, the shipwright, who accompanied major Denham, made him a gun carriage, on which he mounted a small brass cannon that he had procured from Tripoli. The English also cut out a set of harness, and instructed him in the first manœuvres of the light artillery: he was thus soon convinced of their great superiority; but his delight knew no bounds when he was presented with a musical snuff-box, which he had listened to with rapture, and despaired of obtaining. His kindness to our travellers was not quite un-

mingled with suspicion: it was reported by the people that the English, who are supposed by the Africans to have no homes but on the water, intended to build ships on Lake Tshad, and take possession of the country. The sheikh was unwilling to allow the officers to go far from Kouka, and peremptorily refused them permission to continue their journey to Soudan and the Niger.

An opportunity, however, soon occurred of seeing something of the country towards the south. Boo Khaloom was desirous of making an incursion with his Arab retinue into some of the countries inhabited by pagan negroes, in order to collect slaves; and, after much discussion, he was allowed to proceed southwards to Mandara. Major Denham resolved, at any rate, to accompany the expedition; and the sheikh, though at first averse, at length yielded his assent, and appointed a select band of his warriors to take charge of the English officer. This band of marauders, though seemingly countenanced by the sheikh of Bornou and the sultan of Mandara, appears to have been purposely conducted by them against an enemy capable of punishing their temerity. Boo Khaloom led his forces against the Felatahs, who occupy the mountains to the south of Mandara; but they vigorously repulsed the Arabs and their auxiliaries: Boo Khaloom himself died of his wounds; and major Denham, after being stripped naked by the conquerors, escaped almost miraculously from their hands, and rejoined the dejected remnant of the invading army. A superficial knowledge of about 200 miles of country was the sole fruit of this expedition, in which he embarked his own life and the character of his country. He also found means to visit Birnie, the ancient capital of the kingdom; where the sultan treated him with the profuseness of African hospitality. From this place, he proceeded to Angornou, the largest and most populous town in Bornou, and situated but a few miles from Lake Tshad: it is better built than Kouka, many of the huts having four mud walls and two bamhcers. The inhabitants are about 30,000 in number;

and in peaceable times the weekly market is said to be attended by 80,000 or 100,000 persons.

The health of the English suffered severely during the rainy season, but during this period they had the opportunity of ingratiating themselves with the sensible sheikh. On the 21st of December, a kafila arrived, and with it came an Englishman; lieutenant Toole, who was sent by government to strengthen the mission. He brought word that Mr. Tyrwhit, the gentleman appointed for the purpose, had been detained by sickness, and that he was sent forward to convey the intelligence to major Denham and his companions. In January, 1824, he accompanied major Denham on a journey round Lake Tshad, but he soon sunk beneath the noxious influence of the climate, and expired on the 26th of February. On the 19th of May, Mr. Tyrwhit arrived, bearing splendid presents to the sheikh, who readily agreed that he should remain in Bornou as consul.

But, previous to these transactions, on the 14th of December, captain Clapperton and Dr. Oudney had departed for Kano in Soudan, the Ghana of Edrisi and other Arabian geographers. Dr. Oudney, who had been for a long time in a weak state of health, was unable to bear the exertion of travelling, and expired on the 12th of January. Captain Clapperton, though his own strength was very much impaired, and though his spirits were sunk by the melancholy fate of his friend, yet persevered in his intention of making himself well acquainted with the topography of Soudan. The country through which he journeyed was open, well cultivated, and covered with numerous villages; but Kano, the great emporium of the kingdom of Houssa, caused him some disappointment; from the descriptions of the Arabs, he was led to suppose it a city of surprising grandeur; whereas he found the houses nearly a quarter of a mile from the walls, and in many parts scattered into detached groups between large stagnant pools of water. In the market here, however, he bought an English cotton umbrella, and his attention was particularly engaged by

the appearance of the cooks' shops near the shambles, consisting merely of a wood fire, stuck round with wooden skewers, on which small bits of meat were roasting. Beyond Kano the appearance of the country continually improved: the herds of cattle were particularly fine; and the wood, thinly scattered over the hills, gave the scenery the appearance of an English park.

At length he reached Sockatoo, the residence of the sultan Bello. A numerous escort came out to meet him; and he, to impress the natives with a high opinion of his official importance, arrayed himself in his lieutenant's coat trimmed with gold lace, white trousers, and silk stockings; and, to complete his finery, he wore Turkish slippers and a turban. He found Bello seated on a small carpet, between two pillars supporting the roof of a thatched house not unlike an English cottage. He was a handsome man, about forty-four years of age, dressed in a blue cotton robe, with a white turban; the shawl which he wore over his nose and mouth, after the Turkish fashion. He admired exceedingly all the presents that were brought him, especially the compass and the telescope. "Every thing," he said, addressing lieut. Clapperton, "is wonderful; but you are the greatest curiosity of all." While our traveller remained in Sockatoo, provisions were regularly sent to him from the sultan's table on pewter dishes with a London stamp, and one day he had a piece of meat served up in a white wash-hand basin of English manufacture.

The sultan was desirous to know whether the king of England would send him a consul and a physician, to reside in Soudan, and merchants to trade with his people; and whether there were any productions in his country which the English would purchase. According to him, the river Quorra, as the Niger is here called, enters the sea at Funda; and he offered to give the king of England a place on the coast to build a town, so that goods might be conveyed up the river to his country. He spoke also of Mungo Park, and said that a double-barrelled gun, which was found in the boat when that un-

fortunate traveller perished, had been once in his possession. But though the sultan willingly granted that the English "were a wonderful people," he does not appear to have been ever satisfied with the replies made to his often repeated question, "What are your motives for coming here?" He had learned from the Moors that the English, first visiting India as traders, had at length made themselves masters of the country, and he hinted his fears that they might have similar designs on the interior of Africa. Yet he repeated his offers of friendship. He wished to have some Arabic books, and a map of the world, to be sent to him from England; and in return promised his protection to as many learned men from that country as wished to visit his dominions.

Mr. Clapperton returned through Kashna, a considerable town, but going fast to ruin; and on the 8th of July he arrived in Kouka, to which place major Denham also returned, ten days later, from his journey round Lake Tshad. On the 16th of August, 1824, our travellers left Kouka, and arrived at Tripoli on the 25th of January in the following year. Mr. Tyrwhit, who remained behind as consul, did not long survive the departure of his friends: his health was delicate when he arrived at Kouka, where he breathed his last on the 22d of October.

The information obtained from sultan Bello respecting the course of the Niger, and its communication with the sea, with the willingness he expressed to engage in a commercial intercourse with the English nation, seemed to hold out inducements more distinct and powerful than those which had hitherto actuated the promoters of African discovery. Mr. Clapperton was equipped a second time, and directed to proceed into Soudan from the Gulf of Benin, a route hitherto untried, though obviously the shortest of any. As it was supposed also that the Niger emptied itself into the sea on this part of the coast, it was hoped, that he might be able to trace it from the mouth up, and thus finally set at rest a question which during ages had caused so much embarrassment

to geographers. When the party arrived on the coast, however, they renounced the intention of ascending the river, the mouth of which they were informed was surrounded with pestilential swamps. On the 7th of September, 1825, captain Clapperton, accompanied by captain Pearce, an excellent draughtsman, and Dr. Morrison, a naval surgeon of some experience, departed from Badagry, on their journey into the interior of Africa. Before the expiration of the month, however, death had deprived captain Clapperton of his two scientific companions, and he was left to pursue his journey with no European associate but his faithful servant Richard Lander. In the kingdom of Yarriba, sixty miles from the coast, he met with a distinguished reception. All seemed to vie in offering him proofs of respect and friendship. Fyeo, or Katunga, the capital of this kingdom, is fifteen miles in circumference; but there are so many [illegible] and open spaces within this wide circuit, that it was found impossible to conjecture the population.

The chief difficulty which Clapperton had experienced in this journey arose from the desire of the African princes to engross the acquaintance of the stranger; and though willing to shower favours on him themselves, they reluctantly allowed the same gratification to their neighbours. Our traveller, however, visited Boussa, a place interesting as the scene of Park's tragical death. Notwithstanding the devastation of war and the political confusion to which these African states are continually liable, the country appeared generally populous and cultivated. The territory of Zegzeg was covered with fine crops and rich pastures, and produced the finest rice grown in any part of Africa. The population of its capital town, Zaria, within the compass of which are many large gardens and fields of corn, was supposed to amount to 50,000.

Captain Clapperton, after a most interesting journey, at length arrived at Sockatooo; but it was at an inauspicious moment that he waited on the sultan, who no longer regarded him with a friendly countenance. He

knew that the English traveller was the bearer of a present to the sheikh of Bornou, containing among other articles six muskets; and as a war had recently broken out between Bornou and Soudan, this appeared to the sultan a suspicious circumstance. It was rumoured among the people that the English contemplated the subjugation of the nations of Africa; that Clapperton was a spy, sent to examine their condition; and some declared that he ought to be immediately put to death. A little time and address might have got the better of these difficulties, and enabled Clapperton to resume that sway over the sultan to which his civilisation entitled him; but his spirits were depressed by disappointment on his first arrival in Sockatoo; his irritated feelings preyed on a frame weakened by exertion, and the influence of a baneful climate; and after a protracted illness, he expired on the 13th of April. Bello appears to have been somewhat affected by his death, and allowed Lander to perform his funeral obsequies with every mark of respect.

Lander, whose return home was facilitated in every possible way by the sultan, determined to proceed southwards to Funda, in the hopes that by pursuing that course he might be able to trace the Niger to its outlet; and he had actually reached the latitude of that place further to the east, when he was stopped by four horsemen, who were sent to conduct him to the king of Zegzeg. His intention was thus frustrated, and he was obliged to return to Badagry on the coast, where he arrived on the 21st of November, 1827.

The additions to our geographical knowledge of the interior of Africa which we owe to captain Clapperton far exceed in extent and importance those made by any preceding traveller. The limit of captain Lyon's journey southward across the desert was in lat. 24°, while major Denham, in his expedition to Mandara, reached lat. 9° 15′; thus adding 14¾ degrees, or 900 miles, to the extent explored by Europeans. Hornemann, it is true, had previously crossed the desert, and had proceeded as far

southwards as Nyffé in lat. 10½. But no account was ever received of his journey. Park in his first expedition reached Silla, in long. 1° 34′ west; a distance of 1100 miles from the mouth of the Gambia. Denham and Clapperton, on the other hand, from the east side of Lake Tshad in long. 17°, to Sockatoo in long. 5½°, explored a distance of 700 miles from east to west in the heart of Africa; a line of only 400 miles remaining unknown between Silla and Sockatoo. But the second journey of captain Clapperton added tenfold value to these discoveries. He had the good fortune to detect the shortest and most easy road to the populous countries of the interior; and he could boast of being the first who had completed an itinerary across the continent of Africa from Tripoli to Benin.

While Clapperton proceeded on his second journey, major Laing, an officer who had distinguished himself in the Ashantee war, undertook to penetrate to Tombuctoo. From Tripoli he crossed the desert to the south-west by way of Ghadamis. The kafila with which he travelled was attacked by a ferocious band of Tuaricks. Our poor countryman received four-and-twenty wounds, and was left for dead; but by the care of his companions he recovered in a manner almost miraculous, and proceeded on his journey. On the 18th of August, 1826, he achieved the grand object of his mission in reaching Tombuctoo, where he remained above a month. Letters received from him while residing there state that the town is about four miles in circuit, that it is populous and flourishing, and that he had collected valuable materials for the geography of central Africa. On leaving Tombuctoo, Laing agreed with a Moorish merchant named Bambooshi to conduct him as far as Sego: the wretch assented to the proposal; and on the third day of the journey, in passing through the desert, he murdered the unhappy traveller whom he had engaged to protect. But he knew the value of major Laing's papers. It is said that they were conveyed to Tripoli, and that they have been prevented from reaching the British government

by the selfish machinations of a person connected with the French consulate in that city.

Tombuctoo has been since visited by a young Frenchman named Caillié, a person of limited education, but who had early become inflamed with the desire to visit unknown countries. He joined the unfortunate expedition of major Gray, which penetrated as far as Bondou in 1818; and having spent much of his time in the settlements on the Gambia and Senegal, he acquired such an acquaintance with the language and manners of the Moors as encouraged him to undertake a journey alone into the interior of Africa. He accordingly set out from Kakundy on the 19th of April, 1827, with a small caravan of Mandingoes. He was dressed as an Arab, assumed the grave deportment of a Mussulman, and passed on without suspicion. On the 20th of April, 1828, he entered Tombuctoo: but he says, "The spectacle before me did not answer my expectation: at first sight it presents but a heap of houses neither so large nor so well peopled as I expected. Its commerce is less considerable than is stated by public report, a great concourse of strangers coming from every part of Soudan. I met in the streets only the camels coming from Kabra. The city is inhabited by negroes of the Kissour nation: they form the principal population. The city is without any walls, open on all sides, and may contain 10,000 or 12,000 inhabitants, including the Moors." He remained in Tombuctoo about a fortnight, and then returned across the Great Desert to Morocco. He reached Tangier on the 18th of August, 1828, after a most distressing journey of about fourteen weeks. The authenticity of his narrative has been questioned, but on very insufficient grounds. There appears no reason to deny him the honour that courage and enterprise may claim, when unassisted by learning and education. The descriptions of Caillié are always vague and incorrect: he may boast to have been among the first to visit Tombuctoo; but at the same time geography derives but little benefit from his exertions.

In Southern Africa the missionaries from the Cape of Good Hope have added considerably to our geographical knowledge; but there is nothing, either in the natural features of the countries which they have traversed, or in the social condition of the tribes which possess them, to give interest or brilliancy to their discoveries. The central regions of Africa, from Soudan to Mozambique, and from Abyssinia to Congo, still remain utterly unknown. The progress of discovery on that continent must necessarily be slow until some traveller be found, who, following the example of the great navigator Cook, makes the preservation of health the chief object of his care, and instead of hurrying forward continually, regardless of seasons, of fatigue and infirmity, will be contented to advance more slowly, without injury to his constitution.

A vast portion of central Asia is still but little known. From the Malayan peninsula to the northern frontier of Great Tatary, and from the confines of China to the plains of Bokhara, regions of great extent, including perhaps some of the most anciently inhabited countries of the globe, and possessed by nations raised in general considerably above barbarism, are still almost hidden from the knowledge of the civilised world.

National jealousy and religious bigotry present obstacles more difficult to be overcome by the curiosity of man than the barriers of seas and mountains which nature has interposed between nations. Little more than three centuries have elapsed since the earth was first circumnavigated, and its sphericity thus practically proved; and what an amazing progress have navigation and hydrography made during that period! Except within the comparatively narrow circles rendered inaccessible by polar ice, European vessels now visit every part of the ocean; and a navigator can, at the present day, consult maps of the islands in the South Sea far surpassing, in accuracy and minuteness, the maps of Sicily possessed by the Romans in their most cultivated age.

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